LEATH & ROSS'S HOMEOPATHIC PHARMACIES.

9 VERE STREET,

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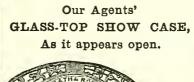
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Agents for L. & R.'s Medicines are now established in every town of any importance in England, some of the principal towns in Ireland and Scotland, several of the British Colonies, and India and America. Upwards of 1,800 persons have accepted the Agency, and many have found this branch a profitable auxiliary to their other business.



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TRADE PRICE £4 48. CONTENTS REALISE £7 1s. 6d.

THE NEW FAMILY CHEST

Contains 28 Bottles of the most useful Homeopathic Medicines, a Guide, giving the treatment of all common complaints, the nses of the Medicines, proper doses, &c. In the lid are the two externals most in use, viz., Arnica and Calendula. It can be fitted to hold either Pilules or Tinctures.

Price 25/; trade price, 16/8.

LEATH & ROSS'S WHOLESALE PRICE LIST OF MEDICINES, ETC.,

PUT TTP READY FOR SALE.

GLOBULES-Medicated any strength up to the 30th potency. | PILULES-Medicated to any strength up to the 30th potency Sixpenny Tubes, 3/- per dozen.

Ninepenny ,, 4/6 Shilling ,, 6/-

TINCTURES—Any strength up to the 30th potency. Sixpenny Bottles, 3/- per dozen.

Ninepenny ,, 4/6 Shilling

Sixpenny Bottles, 3/- per dozen.

Ninepenny " 4/6 Shilling 6/-

TRITURATIONS-

Sixpenny Bottles, 4/- per dozen. Ninepenny ,, 4/6 Shilling

EXPORT ORDERS ARE DESPATCHED WITH THE GREATEST PROMPTITUDE.

Special quotations for large quantities.

& ROSS'S PROPRIETARY ARTICLES.

9/6, 22/, 36/. | NEURALINE, 1/1½, 2/9, 4/6 9/6, 22/. | GLYKALINE, 1/1½, 2/9, 4/6 ... BERBERINE, 1/11, 2/9, 4/6 CHILBLAIN LINIMENT, 1/11, 2/9 ... PHOSPHO-MUR. QUININE, or PICK-ME-UP TINCTURE, 1/13, 2/9 9/6, 22/.

ODONTALGIC ESSENCE, 1/11, 2/9, 4/6

9/6, 22/, 36/. 9/6, 22/, 36/. 9/6, 22/, 36/.

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OZONIZED OIL, 1/, 1/6, 2/6 ... 8/, 12/, 20/. OZONIZED OIL, 1/, 1/6, 2/6 ... 8/, 12/, 20/. HAIR RESTORER, 1/6, 2/6, 4/6

8/, 12/, 20/, 12/, 20/, 36/.

Agents' Counter Cases, £2|2|0, £3|3|0, £4|4|0, £6|6|0, and £10|10|0.

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GREAT REDUCTION IN PRICES

PETROLEUM VASELINE JELLY.

The Prices of "VASELINE" (Pure) in Bottles, "POMADE VASELINE," and CAMPHOR ICE are REDUCED ONE HALF, the Sizes remaining the Same. "VASELINE COLD CREAM" and other Preparations also Reduced. Send for Revised Price Lists.

The following Articles particularly merit attention, and will be found purer, better, and cheaper than any others of the kind ever offered to Chemists, &c.

"VASELINE TOILET SOAP."

The emollicate, antiseptic, and healing properties of Vaseline are well known. These Soaps far surpass any others for their beneficial action on the skin, and are the purest, most delicate, and refined Soaps made. 6d. and 1s. Tablets.

"VASELINE TAR SOAP."

The pleasantest and most effective combination of Tar for all Skin Diseases, and at the same time a delightful toilet article. 6d. and 1s. Tablets.

"VASELINE ANTI-CORROSIVE PASTE."

For smearing surgical instruments, guns, arms of all kinds, bieyeles, household utensils, &c., to prevent rust. 6d. per Box.

"VASELINE BOOT PASTE."

Free from acids and alkalies. Will render the leather durable, soft, and waterproof. Any ordinary blacking polishes over it. 6d. per Box.

"PERFUMED LUXOR OIL."

This Oil is manufactured from the heart of the best crude Petroleum, containing neither the volatile nor the heavy parts of the Oil, both of which we utilise in our regular business of manufacturing Vaseline.

This Oil is consequently superior, both for Burning and Safety, yielding a Perfect Light, and standing over 140° Fire Test. In Odour it is quite different from the ordinary Kerosene in use, a pleasant perfume being substituted for rankness, thus avoiding a principal objection to the use of Petroleum for lighting purposes. Will burn in any ordinary Kerosene or Paraffin Lamp, and is absolutely safe under all circumstances.

Packed in square cans, each holding four imperial gallons, with corked nozzles for filling, and patent fancets of the most approved style. Two cans in a case. Price to the Trade, 10s. 8d. per case (no charge for cans or cases).

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IMPORTANT

TO

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PRICE 10s., CONTAINING UPWARDS OF

4,000 ILLUSTRATIONS of

SURGEONS' INSTRUMENTS & APPLIANCES;

INSTRUMENTS, &c., FOR VETERINARY PURPOSES;

DRUGGISTS' APPARATUS, INSTRUMENTS, UTENSILS,

And other requisites employed in Pharmacy and the Dispensing of Medicines;

MEDICAL GLASS AND EARTHENWARE; MEDICINE CHESTS;

HAIR, TOOTH, AND NAIL BRUSHES; TOILET AND SMELLING BOTTLES; AND

DRUGGISTS' SUNDRIES OF ALL KINDS;

Shop Fittings, Counters, Glass Cases, Desks, Show Stands, &c., &c.,

WILL BE READY FOR ISSUE ON THE

2ND JANUARY, 1882,

And will be PRESENTED GRATIS to all Chemists and Druggists, at Home and Abroad, having accounts open with the Firm.

S. MAW, SON & THOMPSON,

7 to 12 ALDERSGATE STREET, LONDON.

BY HER MAJESTY'S



ROYAL LETTERS PATENT

ARNOLD & SONS'

Patent Vaporifer. Bronchitis Kettle, Inhaler, and Portable Vapour Bath combined AS SUGGESTED BY W. L. SHEPARD, M.R.C.S., &c.

Extract from the "LANCET," January, 1879.

"An apparatus which can be used either as a bronchitis kettle and inhaler, or a portable vapour bath, that cannot get out of order or burn, even if allowed to boil dry, that can be refilled without moving from the fire or stopping the generation of steam, is, I think, likely to be useful to the profession, especially at this sea-

profession, especially at this season. Such an apparatus, which I propose calling the Vaporifer, has been made for me by Messrs. Arnold & Sons, of West Smithfield. The woodcut sufficiently explains its very simple construction. It has no bottom, and when in use stands in any ordinary saucepan, so that, should it boil dry, the worst that can happen will be the spoiling of a sixpenny saucepan, easily replaced. The top of the apparatus is closed, and



on its inner surface, enclosing the orifice of the steam-pipe, is a movable circular chamber, having a perforate bottom, on which any drugs can be placed when it is wished to medicate the varour. The crescent-shaped from permits of the saucepan being refilled without moving from the fire, and is boiling water be used the steam is generated continuously. By removing

generated continuously. By removing part of the steam-pipe and affixing the mouthpiece, a very handy and efficient inhaler is formed. Placed over a gas-stove or spirit-lamp, it can be used as a portable vapour bath. A not unimportant advantage is its triding cost, as Messrs. Auxoud tell me it can be sold for less than either of the three apparatus which it replaces. Lastly, it packs in a neat, compact case, and may be had at the nearest chemists', to the great saving of the family teakettle, which, hurriedly pressed into the service, displays a great deal of uscless zeal by vigorously blowing its steam up the chimney, and often comes to an unfinely end by having its bottom burned out."

Extract of Letter received from J. F. FINCHETTE, Esq., Portland House, Brunswick Square, W., dated Feb. 18, 1879.

"'Vaporifer, all complete, came to hand safely on Saturday last, with thanks, and I consider it a marvel of cheapness and utility, and wish Dr. Shepaho all success with his invention, which, I feel assured, only needs to be known to be appreciated. I have tried it for each of the purposes for which it is intended, and found it answer completely."

Trade Price, 42s. per doz. Retail Price, 5s. With Lamp, Saucepan, and Stand complete, 63s. per doz. Retail Price, 7s. 6d.

SOLE MANUFACTURERS AND PATENTEES-

ARNOLD & SONS, Instrument Makers,

By Appointment, to Her Majesty's Government, St. Bartholomew's Hospital, and the Principal Provincial and Colonial Hospitals, &c.,

35 & 36 WEST SMITHFIELD, LONDON, E.C.

MEDICINE CHESTS.

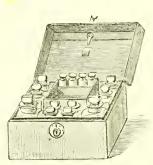
A. H. SMITH,

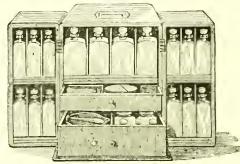
MEDICINE CHEST MANUFACTURER,

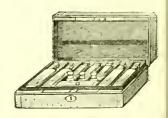
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LIBERAL TERMS TO WHOLESALE HOUSES, EAST INDIA AND COLONIAL AGENTS, ETC., ETC.

PRIZE MEDAL,

LONDON, 1862.

NOTICE TO THE TRADE.

PHILADELPHIA, 1876.

NOVEMBER, 1881.

LOW'S FLOWER EXTRACTS, &c.,

ARE NOW REDUCED IN PRICE, AS BELOW:-

			per	lb.					per	lb.				pe	r lb.
Ext.	Cassie	•••	•••	9/6	Ext.	Rezeda	1	•••	• • •	9/6	Ext.	Tubereuse	• • •		9/6
,,	Jasmin	• • •	•••	9/6	,,	Rondel	letia	•••	• • •	8/-	,,	Violet			15/-
,,	Jonquil	•••	•••	9/6	,,	Rose		***	• • •	9/6	"	Verbena			8/-
,,	Lily of the	Valley	•••	9/6	,,	Rose G	leraniu	ım	• • •	8/8	,,,	White Rose	•••	•••	10/6
,,	Magnolia	•••	•••	9/6	,,	Spring	Flowe	rs		9,8	,,	White Lilac		• • •	9/6
,,	Orange Flo	wer	•••	9/8	,,	Stepha	notis			9/8	,,	Wood Violet			13/6
11	Patchouli	•••	•••	9/6	,,,	Sweet	Briar	•••		8/8	,,,	Wild Rose	• • •		9/6
"	Queen of t	he Alps	•••	9/8	,,	Tea Ro	980	•••	•••	9/6	,,	Ylang Ylang			9 6

These Extracts have always had the highest reputation; they are all of our own manufacture, are guaranteed pure, and of triple strength, and will compare favourably with any in the Trade.

N.B.—Owing to the failure of the VIOLET crop in 1880, however, this Extract is advanced in price, and will probably remain high for some time. Purchasers are warned against the spurious Ext. Violets already in the market.

LOW'S COMPOUND PERFUMES,

For Dilution by the Trade, are the Strongest in the Market, viz .:-

ESS. BOUQUET, JOCKEY CLUB, & FRANGIPANNI.

Price 14/- per lb.; or 13/- in Winchester Quarts.

LOW'S NURSERY SOAP.

This Soap is the result of considerable study and many experiments, the object desired being to produce a soap that would be quite neutral, and thus innocuous to the most tender skin, yet one that would lather freely, and not waste quickly away.

Price 33/- per Gross; or 11/- per doz. Boxes of 4 Tablets.

FAMILY BROWN WINDSOR SOAP,

At 60/- per cwt., Genuine, and Sweetly Perfumed.

This Soap is recommended to the Trade as the best value that can be obtained. Embossed Squares, 6 to lb., and in 14-lb. Boxes.

Also in Tablets, 3 to lb., 2/ per dozen, in 3-dozen Boxes.

Discount, 10 per Cent. Cash at a Month, or 5 per Cent. payable on Journey.

R. LOW, SON & HAYDON,

Perfumers, Toilet Soap Makers, and Brush Manufacturers,

330 STRAND (SOMERSET HOUSE) LONDON.

S. MAW, SON & THOMPSON'S

FEEDING BOTTI



Alexandra Feeding Bottle, Screw Metal Caps, 11/ per doz.



Alexandra Feeding Bottle, Gilt Porcelain Cap, 20/ per doz.



Alexandra Feeding Bottle, Earthenware Cap, 10/ per doz.



Alexandra Feeding Bottle, Screw Glass Stopper, 10/3 per doz.



Alexandra Feeding Bottle, Earthenware Cap, 7/6 per doz.



Fountain Feeding Bottle,
Pure Tin Mount,
20/ per doz.



Fountain Feeding Bottle,
Pure Tin Mount,
12/per doz.



Alexandra Feeding Bottle, Wood-Top Cork, 3/9 per doz.



Oval Feeding Bottle; Earthenware Cap, 7/6 per doz.



Export Feeding Bottle, Earthenware Cap, 7/3 per doz.



Export Feeding Bottle, Screw Glass Stopper, 7 6 per doz.



Export Feeding Bottle, Screw Metal Cap, 8/6 per doz.



Export Feeding Bottle, Metal Cap, 4/3 per doz.



Export Feeding Bottle,
Wood-Top Cork,
3/6 per doz.



Export Feeding Bottle, Screw Glass Stopper, 4/3 per doz.



Export Feeding Bottle, Screw Metal Cap, 4/6 per doz.

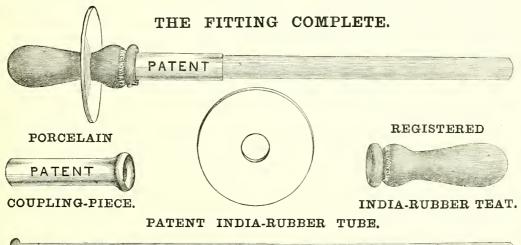
SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

FOR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 53, 54.

S. MAW, SON & THOMPSON,
7 to 12 Aldersgate Street, London.

S. MAW, SON & THOMPSON'S IMPROVEMENT IN FEEDING BOTTLES.

Patented in England, December 4, 1879;
Patented in the United States, April 27, 1880.



Patent India-rubber Tubes, in ½ gross and 1 gross Boxes—

9 inch White per gross, 10/6 9 inch Black per gross, 15/10 ,, super ... , 16/-

Registered India-rubber Teats, in 1 doz. Boxes-

2 Sizes (Small and Medium), per gross, White, 8/ & 14/; Black, 12/ & 21/-

Patent Coupling-pieces, in 3 doz. Boxes per gross, 8/-

S. MAW, SON & THOMPSON beg to inform the Trade that in future all their Feeding Bottles, except Sixpenny, will be fitted with the above **PATENTED IMPROVEMENT**, unless ordered to the contrary.

The improvement consists in the introduction of the New Registered Teat, and in the construction of the Coupling-piece, the latter **passing over** the **exterior** of the India-rubber Tube, by which arrangement injurious contraction is avoided, and the cleaning of the Tube facilitated, a Tube Brush being easily passed through without the removal of the Coupling-piece.

In the fitting-up of ordinary Feeding Bottles, the Shield fixes the Teat upon the Union Joint, preventing its easy removal, and making it difficult to replace the Teat in its air-tight position, without which the action of no Feeding Bottle is perfect. The New Registered Teat is so formed as to receive the Shield and retain it in position without connection with the Coupling-piece, the Teat thus being easily removed and replaced without damage.

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

S. MAW, SON & THOMPSON, LONDON.

THE CONDY'S FLUID CASE

TWO APPEALS.

CONDY V. MITCHELL.

(The question of Proprietary Right.)

COURT OF APPEAL, LINCOLN'S INN, Nov. 27th, 1877—CONDY, Appellant.

LORD JUSTICE JAMES (without needing to hear Defendant's Counsel) said—That such a suit should have been instituted at all was very remarkable; but that, after the learned Vice-Chancellor's judgment, this appeal should have been brought on was particularly strange. Dr. Mitchell had obtained his right by payment of a substantial money consideration, and Condy's Fluid and Condy's Ozonised Water were as much his property as the Plaintiff's, WITH ALL THE REPUTATION THERETO ATTACHED, PRIZE MEDALS INCLUDED. Having that right, Dr. Mitchell was entitled to set up the Condy's Fluid Company.

LORD JUSTICE BAGGALLAY was of the same opinion. The style of the partnership had been "Bollman Condy & Co.," and the plaintiff had set up in his own name of "H. Bollman Condy." It was not necessary to consider whether he could have been restrained from doing so; but he came with a very bad grace against the defendant. It was to be regretted that the plaintiff had resorted to the method he had used to obtain evidence. HE HAD RESORTED TO WHAT WAS, IN FACT, A TRAP TO CATCH CHEMISTS.

LORD JUSTICE THESIGER was also of that opinion, and especially as to the character of the plaintiff's (Condy's) evidence.

LORD JUSTICE JAMES: APPEAL DISMISSED WITH COSTS.

MITCHELL V. CONDY.

(The Partnership Accounts of the late Firm c Bollmann Condy & Co.)

COURT OF APPEAL, LINCOLN'S INN, May 18th, 1881-CONDY, Appellant.

The MASTER OF THE ROLLS, in delivering judgment, said :-- I am at a loss to understand th ground of this appeal. The bargain between th parties, elearly set out in the Partnership Deed, wa this: The one (Mitchell) to pay a premium o £1,500, and to bring into the partnership £1,500 more; the other (Condy), who had, he said, eapita sunk in the business, to have his said eapital taker at the sum whereat it stood in March, 1866, namely £2,496. There is not the slightest doubt or ambiguit about the matter, and so the Viee-Chancellor decided The decree for the partnership accounts to be take: was made so long ago as the 15th June, 1877. I was made on the admission by the defendant (Condy of the Articles of Partnership, and without a hin being thrown out that there was anything erroneou in them requiring revision or alteration. The sug gestion which has been made on the part of th defendant (Condy), that a man who had entered into partnership may plead that he is taken by surpris when his partner insists on the plain terms of th Partnership Deed being held to be binding, eanno for a moment be listened to. This appeal must b dismissed.

LORD JUSTICE JAMES: I entirely concur The attempt that has been made to seek to contro or nullify the provisions of so formal an instrumen as a Deed by reference to anterior conversations and memoranda is very idle.

LORD JUSTIČE LUSH: I am quite of the sam opinion. In the statement of defence, from the be ginning to the end, there is not a suggestion that the Articles of Partnership were ever departed from, by parol or otherwise, so as to concede to the defendan (Condy) an increase in the estimate of his capital beyond the amount specified in the Deed.

The MASTER OF THE ROLLS: APPEAL DIS MISSED WITH COSTS.

N.B.—The CONDY'S FLUID COMPANY are determined to put a stop to the underhande attempts made to pass off goods bearing labels and names of firms fraudulently resembling theirs. The Company beg to bring this practice to the notice of the trade, to whom they would feel oblige for information leading to detection.

Reduced Trade Prices, and most liberal Wholesale Terms.

THE CONDY'S FLUID CO.

7 FALCON STREET, LONDON, E.C.

RADE



MARK.

A bland, odourless, perfectly pure Hydro-Carbon Jelly, of greater smoothness, firmer consistency, and better appearance than any other Petroleum Jelly.

SAMPLES PÖSTAGE FREE ON APPLICATION.

PRICES—In 7-lb., 14-lb., and 28-lb. Tins, 8d. per lb.; in 56-lb. and 112-lb. Drums, 7d. per lb.

Tins and Drums free.

We also Manufacture a VETERINARY FOSSILINE, which, at the low price we offer it, can be used for Smearing Purposes; also for Veterinary Ointments, &c.

PRICES-In 1-cwt. and 1-cwt. Drums, 56/ per cwt. Drums free. Subject to usual Discount.

FOSSILINE (SIMPLE)

As a REMEDIAL AGENT the properties of FOSSILINE are not to be excelled. Physicians have found it invaluable as a basis for Ointments, &c., and as a vehicle for employing the most prized and potent medicines. It is now used in the leading Hospitals in Europe and Canada. It Cannot become Rancin, and as an EMOLLIENT it is undoubtedly the best yet discovered, being far superior to Glycerine, Cold Cream, or Camphor Balls in softening and healing properties. As a HOUSEHOLD REMEDY it is recommended as an application to Burns, Cuts, Bruises and Sprains, Sunburns, Chilblains and all other Skin Diseases, and the Bites of Poisonous Insects.

Sold in Bottles, One Shilling each; 8/ per dozen.

The following preparations may also be obtained:-

SAVAR'S FOSSILINE POMADE

Prevents the hair from falling off, and as a smaller quantity is sufficient for use, it is the most economical Hair Dressing known.

Sold in Three-Ounce Stoppered Bottles, One Shilling each; 8/ per dozen.

Also in Sixpenny Bottles; 4/ per dozen.

TOILET FOSSILINE SOAP

Highly emollient and economical, the most agreeable Soap.

In Tablets, 6d. each; or in 1/6 and 5/Boxes; 4/, 13/, and 48/ per dozen.

These Toilet Requisites are exquisitely perfumed with the delicate odours of the Montserrat Lime Tree Blossoms.

SAVAR'S FOSSILINE PLASTER,

Invaluable for use in Hospitals, and generally as a substitute for other Plasters, for the following reasons:

1st. It is more pliable, it will adhere more readily without the application of heat, and will remain on the required spot. 2nd. It can easily be removed for the inspection of wounds, or redressing; and, unlike ordinary Plaster, does not soil the hands or the part to which it is applied. 3rd. It is cooling and healing to wounds, it stimulates the granulation to a healthy action, and is of great service as an application to bed sores.

PRICES-9/ per dozen Yards on Soft Calico; 12/ per dozen Yards on Brown Holland; or in Boxes to Retail, 9d. each, 6/ per dozen. Subject to usual Discount.

CORN FOSSILINE PLASTERS

Are emollient and cooling, and as they do not require wetting or warming, are easily applied.

In Bulk (\frac{1}{2} gross glass-top Boxes), 3/6 per gross; and in Boxes, Retail 6d. and 1/each, 3/6 and 7/per doz.

SUBJECT TO THE USUAL DISCOUNT.

Be sure to ask for FOSSILINE and SAVAR'S preparations of it, and see that you get them, and not any others SAID TO BE of a similar nature. See that the Trade Mark is on the label.



SOLE PROPRIETORS,

EVANS, SONS & CO.,

EVANS, LESCHER & WEBB,

56 Hanover Street, Liverpool.

60 Bartholomew Close, London.

H. SUGDEN EVANS & CO., Montreal, Canada, and Rouse's Point, New York.

H. BROOKS & CO.,

COLLAPSIBLE TUBE MANUFACTURERS

PATENTEES AND SOLE MANUFACTURERS OF THE

PORTABLE METAL SPRINKLER STOPPER.

BOTTLES GLASS PERFUMERS AND FOR

STEAM FACTORIES:

31 LIME STREET, CAMDEN ROAD (COUNTING HOUSE), AND SHOW-ROOMS), 31 to 36 CUMBERLAND MARKET. REGENT'S PARK. BARTHOLOMEW ROAD, KENTISH TOWN, LONDON, N.W.

ESTABLISHED 1810.

COLLAPSIBLE TUBES OF ALL SIZES.



For Perfumes, Artists' Colours, Soaps, Cosmetiques, Creams, Oils, Varnishes, &c. These Tubes are inexpensive and portable, and may be applied many useful purposes besides those above mentioned.

SOLE MANUFACTURERS AND PATENTEES OF

THE PORTABLE METAL SPRINKLER STOPPER.



With Cork fitted thereon for bottles of any size, and having apertures of various dimensions, especially adapted for Perfumes, Hair Washes, Lime and Glycerine Essences, &c. These handsome stoppers give a character and finish to the most ordinary bottles to which they may be applied. Gilt or plain; and put up if required in handsome glass lid boxes, suitable for shop counters and show cases, at moderate prices.





THE "TORSION" PATENT SPRINKLER.

The two designs, Nos. 18a and 19a, are those to which we direct special attention, as sizes being in general use; other sizes will follow promptly to meet all requirements, on which Caps with two or more holes will be introduced to meet the public taste,



Particular attention is called to the latest improvement in our Patent Metallic Stopper, the "Torsion."

This New Stopper adheres to the design of the original patent, which has been universally acknowledged as an ornamenta and inexpensive article for the Toilette, as possessing all the advantages of a "Permanent and Indestructible Stopper, suitable for Bottles of all Sizes and Shapes," with the additional security it affords, that the Cap can never be entirely unscrewed consequently it cannot be lost. It is specially effective as a Sprinkler, while giving a more prompt and copious, yet economisupply, through the improved action of the Cap. Such combined advantages, in an article of exquisite finish, have long been desired, and it is thus submitted for general approval, and its usefulness when tried will be appreciated by all.

Illustrations, Price Lists, &c., can be had on application, or through any Wholesale House in town or country. All Orders received direct will be appropriate attended to

Orders received direct will be promptly attended to.

CAUTION .- All Stoppers of our Manufacture are made of Pure Tin, and have the name of H. BROOKS & CO. stamped on the under side of the rim.

All Tubes are made of Pure Tin unless specially ordered of Mixed Metal, from the smallest size up to 13 in. by 23

ROWLAND'S TOILET ARTICLES,

20 Hatton Garden, London, Have heen known for the last 80 years all over the world, and being well advertised,



and always finding a ready sale, are well worthy the attention of Chemists,
Druggists, and Storckeepers.

ROWLAND'S MACASSAR OIL

Is universally held in high repute for its unprecedented success during the last 80 years in promoting the growth, restoring, improving, and beautifying the human hair. It prevents hair from falling off or turning gray, strengthens weak hair, cleanses it from scurf and dandriff, and makes it beautifully soft, pliable, and glossy. For children it is especially recommended, as forming the basis of a heautiful head of hair, while its introduction into the nursery of Royalty is a sufficient proof of its merits. Sizes, 3s. 6d., 7s., 10s. 6d. (equal to four small), and 21s. per bottle.



ROWLAND'S KALYDOR

Is a most refreshing preparation for the Complexion, dispelling the cloud of languor and relaxation, allaying all heat and irritability, and immediately affording the pleasant sensation attending restored elasticity and healthful state of the skin. Freckles, Tan, Spots, Pimples, Flushes, and Discoloration fly before its application, and give place to delicate clearness, with the glow of beauty and of hloom. In cases of sunburn, or stings of insects, its virtues have long been acknowledged. Price 4s. 6d. and 8s. 6d. per bottle.

ROWLAND'S ODONTO

Or PEARL DENTIFRICE is of inestimable value in preserving and beautifying the teeth, strengthening the gums, and giving a pleasant fragrance to the hreath; it eradicates tartar from the teeth, prevents and arrests decay, and polishes and preserves the enamel, to which it imparts a pearl-like whiteness. Its unprecedented success for more than half a century shows the universal favour in which it is held, while the fact of its being entirely free from any acid or mineral ingredients constitutes it the safest and purest tooth powder ever used.

ROWLAND'S EUKONIA

Is a new and fragrant Toilet Powder, specially recommended to ladies. Each box has inside the lid a certificate of purity from Dr. Redwood, Ph.D., F.C.S. 2s. 6d, per hox.

IMPORTANT CAUTION.—To protect the public from fraud, ALL ROWLAND'S ARTICLES have on the WRAPPER their SIGNATURE, "A. ROWLAND & SONS," in red ink; the genuine Kalydor has a 6d. Government stamp across the stopper, and the gennine Odonto a 3d. Government stamp across the box. Buy only ROWLAND'S articles, of 20 HATTON GARDEN, LONDON.

COUNTER BILLS, SHOW CARDS, &c., CAN ALWAYS BE HAD ON APPLICATION.

THE NEW SEAMLESS TIN BOXES,

In Crystallised, Decorated, or Plain Tin Plates, suitable for Blacking, Polishing Paste, Tooth Powder, Plate Powder, Pomade, Lozenges, &c., &c.

SPICE AND BISCUIT BOXES, COFFEE, MUSTARD, AND POWDER CANISTERS.
LIQUID PAINT TINS, &c.

C. SMITH & SONS, ARUNDEL WORKS, SHEFFIELD.

SILVER MEDAL,



THE

Tin-Plate Decorating Co.,

CRYSTALLIZED TIN BOXES,

PARIS, 1878.

FOR TOILET AND OTHER PURPOSES.

GOLD MEDAL,



SYDNEY, 1879.

SEAMLESS DECORATED TIN BOXES.

Suitable for Blacking, Polishing Paste, Tooth Powder, Pomade, Pills, Lozenges, &c.

DECORATED TIN CANISTERS,

For Disinfectant Powder, Baking Powder, &c., &c., &c.

WORKS: NEATH, SOUTH WALES.

RESPIRATORS!!

Maw's Incorrodible M	${f [etalli_4]}$			dsome 6	ely label 7	led box,- 8			
10/- 21/- 30/-	32/-)/- 4		50/-	56 /-]	per (doz.	
Dwarf	•••	•••	No.		2	3 40/ :	n 031	dos	
				4/-	30/-	40/-			,
Maw's Scarf, Silver-plated		•••	•••		•••	per doz.	3	s. 4	d. O
Ditto Gilt	•••	•••	• • •	•••	•••	,,	4	16	0
Maw's Æthereon (full-sized	instrum	ent)—	Silver-pl	lated,	in paper	c			
cases	•••	• • •	•••	• • •	•••	,,	2	0	0
Maw's Æthereon (full-sized :	instrum	ent) — (Gilt, in d	cloth o	eases	,,	3	4	0
Maw's Micro-Æthereon (6	liminish	ed inst	rument)						
Silver-plated, in morocco	cases	• • •	•••	• • •	• • •	,,	2	0	0
Gilt, in morocco cases	• • •	•••	•••	•••	• • •	"	3	4	0
Maw's Cork, in neat boxes	•••	•••	•••	• • •	• • •	,,	0	6	0
The Cloud, in neat boxes	• • •	• • •	•••	•••	•••	,,	0	8	0

RESPIRATORS OR PNEUMOCLIMES—JEFFREY'S PATENT.

	Superior, R	ichly Gilt.	Standard,	Ordinary.	Common M	aterials.
	Wholesale, each.	Retail,	Wholesale,		Wholesale, each.	Retail,
Dwarf, in cardboard boxes	4/8	7/0	3/8	5/6	$\{rac{2/4}{1/11}$	$\frac{3/6}{2/6}$
Himalene, highly finished, gentlemen's with Shawl Scarf; also removable, for						
using in the hand	10/0	15/0	5/4	8/0	3/4	5/0
Himalene Promenade, to be held in the hand or suspended	6/0	9/0	4/0	6/0	• • •	•••
Nasal, variable power, ladies' or gentle-	,	•		·		
men's Oral, low power, ladies' or gentlemen's	6/0	9/0	7/0 4/8	7/0	•••	•••
Oral, second or full power, ladies' or	i					4.70
gentlemen's			5/8 3/8	8/6 5/6	3/0	4/6
Orinasal, variable power, medium to	•••	•••	3/0	3/0	•••	•••
low, ladies' or gentlemen's	9/4	14/0	7/0	10/6	4/0	6/0
Orinasal, variable power, medium to				0.10		
low, children's	•••	•••	4/4	6/6		•••

S. MAW, SON & THOMPSON,

7 to 12 ALDERSGATE ST., LONDON.



A NOVELTY IN PLASTERS.



TRADE MARK.

BY ROYAL



LETTERS PATENT.

PLAIN and POROUS in SHEETS and MARGINAL.

The Plasters are spread on a new material, imitating Chamois Leather, which is superior to Moleskin, or even skins of leather, being pliable, stout, strong, and durable. The composition used is also patented, and it is less liable to crack in intense cold than any other.

These Plasters obtained an Award of Merit at the International Medical and Sanitary Exhibition held at South Kensington Museum.

POROUS-In one yard lengths, 71 inches wide.

Belladonna	••	 		• •		15/ pe	r dozen yards
Capsicum		 ••	••		••	15/	,,
Roborans	٠.	 ••	••			11/	,,
Strenthening	g	 	••	• •	••	11/	,,

MARGINAL PLASTERS-POROUS.

Balsamie-Long Shape	No1	2	3	4	6	8
	8d.	1/4	2/	2/8	4/	- per doz.
Ralladonna Long Shone		4)/	9/8	41	c1	C/

These Plasters are the same sizes as ordinary marginal plasters on leather. They are protected with Muslin on the back.

MARGINAL PLASTERS-PLAIN.

On Leatherine.	Retail Price	Balsamic. Per doz.	Roborans, Per doz.	No.	Belladonna. Per doz.	Capsicum Per doz.
Heart Shape .	1d.	0s. 8d.	_	-	_	_
,, ,,	2d.	1s. 4d.	_		_	
,, ,, ,	3d.	2s. 0d.	_	-		- 1
,, ,, ,	4d.	2s. 8d.				- 1
Long Shape	1d. 2d. 3d. 4d. 6d.	0s. 8d. 1s. 4d. 2s. 0d. 2s. 8d. 4s. 0d.	2s. 0d. 2s. 8d. 4s. 0d.	3 4 6 8	2s. 0d. 2s. 8d. 4s. 0d. 8s. 0d.	2s. 0d. 2s. 8d. 4s. 0d. 8s. 0d.
Saddle Shape .	-	- 1	2s. 8d.	-		_
91 · 11 ·			4s. 0d.			

NOTE.—These Plasters are cheaper than any other kind, the size of the 4d. Plaster being the same as ordinary 6d. Other sizes in proportion.

SAVAR'S POOR MAN'S POROUS PLASTERS

ON LEATHERINE, 24/ per gross.

WE ARE ALSO PROPRIETORS OF

SAVAR'S POROUS MARGINAL PLASTERS

ON LEATHER

These Plasters are spread on Leather	specially prepared and perforated, and	are ventilating, more pliable, adhere	nore closely, and in every way supe-	ior to the ordinary marginal plasters.
These Plasters	specially prepared	are ventilating, 1	nore closely, and	for to the ordina

On Leather.	No.	Retail Price.	Balsamic, Calefaciens, Roborans, or Strengthening.	Retail Price.	Belladonna, Capsicum, or Opium.
Heart Shape Fig. 104.	1 2 3 4 6	1½d. 3d. 4d. 6d. 8d.	Per Doz. 1s. od. 2s. od. 2s. 8d. 4s. od. 6s. od.	4d. 6d. 8d. 1/-	Per Doz. 2s. 8d. 4s. 0d. 6s. 0d. 8s. 0d.
Long Shape Fig. 105.	1 2 3 4 6 8	1½d. 3d. 4d. 6d. 8d. 1/-	1s. 0d. 2s. 0d. 2s. 8d. 4. 0d. 6s. 0d. 8s. 0d.	4d. 6d. 8d. 1/- 1/6	2s. 8d. 4s. 0d. 6s. 0d. 8s. 0d. 12s. 0d.
Saddle Shape Fig. 106.	=	8d. 1/-	Roborans or \ 6s. 0d. Strengthening \ 8s. 0d.	=	=

the back, on which is printed a Facsimile of page 66 of our Catalogue. We can supply them with plain backs, if required.

Ordinary Marginal Plasters, on Leather, at the usual prices. Every other description of Plasters for Surgeons can be spread to order on any material.

SAVAR'S FOSSILINE CORN PLASTERS

Are Emollient and Cooling, and as they do not require wetting or warming, are easily applied. In bulk (\frac{1}{2}\cdot \text{gross Glass Top Boxes}), 3/6 per gross; and in Boxes retail, 6d. and 1/each; 3/6 and 7/per dozen.

Subject to 10 per cent. discount, 3 months current account.

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WILLIAM MATHER,

MANUFACTURER OF

Indiarubber, Medicinal, Adhesive, Porous, Bunion, Corn, Court, Kid, Leather, Mustard, Roll, Spread, Pharmaceutical, and Surgical



Of every Description, in the most approved Form. Quality first importance. Every Article warranted.

IMPORTANT TO PHYSICIANS, SURGEONS, AND CHEMISTS—

MATHER'S ROYAL BALSAMIC PLAISTERS

Are manufactured of the same kind of ingredients as those sauctioned and ordered by Dr. Andrew Smith, Director-General of Her Majesty's Army and Navy Ordnance Medical Department, for the use of the Soldiers and Marines in Scutari Hospital.

——————————————————————————————————————	Oldh	ance medical	Department,	, 101 1	no use or	the bold	iers and r	armes m	Centarr 1	Tospitai.
LEATHER PLAISTERS.	No.	Full Size of Leathers.	Retail Prices.	Per doz.	Mather's Royal Balsamic Plaister.	Tomlin- son's Cod Liver Oil.	Plain Plaister.	Emp. Roborans or Calefacions	Emp. Bella- donna. No. 1.	Emp. Bella- donna. No. 2.
Heart Shape	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 3\frac{1}{2} \\ 4 \\ 5 \end{array} $	1nches. $3 \times 4\frac{1}{2}$ $4\frac{1}{4} \times 6$ $4\frac{1}{2} \times 7\frac{1}{2}$ $5\frac{1}{2} \times 7\frac{3}{4}$ $6\frac{1}{2} \times 8\frac{1}{2}$ $8 \times 9\frac{3}{4}$	d. 1 size. 1½ ,, 2 ,, 3 ,, 4 ,, 6 ,,))))))))))	s. d. 0 8 1 0 1 6 2 3 3 0 4 6	s. d. 0 8 1 0 1 6 2 3 3 0 4 6	s. d. 0 8 1 0 1 4 2 0 2 8 4 0	s. d. 0 8 1 0 1 4 2 0 2 8 4 0	s. d. 1 4 2 0 2 8 4 0 5 4 8 0	s. d. 1 0 1 6 2 0 3 0 4 0 6 0
Long Shape	$ \begin{array}{c c} 1 \\ 2 \\ 2^{\frac{1}{2}} \\ 3 \\ 4 \\ 5 \end{array} $	$\begin{array}{c} 2\frac{3}{4} \times 4 \\ 4\frac{1}{4} \times 6\frac{3}{4} \\ 4\frac{1}{4} \times 8\frac{1}{4} \\ 5\frac{1}{4} \times 9\frac{1}{4} \\ 6\frac{1}{3} \times 11 \\ 7\frac{1}{2} \times 14\frac{1}{2} \end{array}$	1 ,, 2 ,, 3 ,, 4 ,, 6 ,,	;; ;; ;; ;; ;;	0 8 1 6 2 3 3 0 4 6 6 8	0 8 1 6 2 3 3 0 4 6 6 8	0 8 1 4 2 0 2 8 4 0 6 0	0 8 1 4 2 0 2 8 4 0 6 0	1 4 2 8 4 0 5 4 8 0 12 0	1 0 2 0 3 0 4 0 6 0 8 0
Oval Shape	1 2 3	$\begin{array}{ccc} 4\frac{1}{4} \times & 6\frac{1}{2} \\ 6\frac{1}{4} \times & 8\frac{1}{2} \\ 7\frac{3}{4} \times & 9\frac{3}{4} \end{array}$	2 ,, 4 ,, 6 ,,	;; ;;	1 6 3 0 4 6	1 6 3 0 4 6	1 4 2 8 4 0	1 4 2 8 4 0	2 8 5 4 8 0	2 0 4 0 6 0
Saddle Shape	1 2 3	$6\frac{1}{4} \times 12\frac{1}{4} 7 \times 15 8 \times 16$	6 ,, 8 ,, 12 ,,	" "	4 6 6 8 8 8	4 6 6 8 8 8	4 0 6 0 8 0	4 0 6 0 8 0	8 0 12 0 15 6	6 0 8 0 12 0
Wrist Wast Plays 1.1	1	$3 \times 10^{\frac{1}{4}}$	3 "	,,	2 3	2 3	2 0	2 0	•••	
RNEE PERSTER	2	$4\frac{1}{4} \times 15$	6 ,,	,,	4 6	4 6	4 0	4 0		
Emp. Plumbi, for Ladies' Emp. Plumbi, for Ladies' Emp. Plumbi, for Ladies' Emp. Plumbi, for Ladies' ditto spread on Chamois	No.	Leather Pr	etail rices. s. d. size 2 8 7, 4 0 4 0 6 0	Emp	PLAISTE NAME. Adhæsivum Adhæsivum Ammon.c. Antim. Por Belladonna Calefaciens	Gin Opt Hydrarg t. Tart 1	READ.—P azed Ungla: clot 4/0 5/2 6/0 0/0 0/0 8/0 1/0 12/0	12,0	Swans- down 12/0 21 30/0 36 24/0 36 27/0 36	Yards. Skins of Leather 4/0 60 56 4/0 60 5/6 4/0 4/0 4/0 4/0 4/0 4/0 4/0 4
BREAST PLAISTERS.	No.	Leather Que	o. 1 No. 2. Quality. Per doz.	,, ,, ,,	Cerat. Sapo Dreadnoug Elemi Ferri	onis	8/0 9/0 9/0 10/0 9/0 10/0 9/0 10/0	14/0 14/0 14/0	$\begin{array}{c cc} 14/0 & 24 \\ 14/0 & 24 \\ 14/0 & 24 \\ 14/0 & 24 \end{array}$	4/0 4/6 4/0 4/6 4/0 4/6 4/0 4/6
Emp. Belladonna, for Ladies' Breasts ditto ditto spread on Chamois ditto ditto HOSPITAL PLAISTER, 0	2 1 2 n Black	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4 4 0 0 6 0 0 6 0 0 9 0 oz. yds. 8/0	;; ;; ;; ;; ;; ;;	Galbani Hydrarg. lodine Opii Picis Co Plumbi Potass. Iod	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4/0 4/0 5/0 5/0 15/0 6/0 1/0 12/0 5/6 6/6 5/0	18/0 27/0 15/0 12/0	24/0 30 18/0 27 30/0 36 27/0 36 15/0 24 12/0 21 30/0 36	7/0 4/6 7/0 4/6 3/0 5/6 3/0 5/6 4/0 4/6 1/0 4/0 5/6
,, ,, G	n White	2 ,,	,, 8/0	"	Potass, Iod Resinæ		5/6 6/6			5/0 5/6 1/0 4/0

MANUFACTORY-DYER STREET, HULME, MANCHESTER.

Roborans Saponis Alb.....

Every other description of Plaister used in Pharmacy or Private Formulæ spread on any material, to suit any climate.

See opposite page.

MATHER'S PLAISTERS, &c.

MATHER'S SURGEONS' RUBBER ADHESIVE PLAISTER.

This article has met with unprecedented success, and has been emphatically pronounced by our most skilful Surgeons as "the best Surgeons' Adhesive Plaister known." It is applied without heat or moisture, conforms quickly to the parts, is perfectly flexible and waterproof, and is ready for use at any moment. It is free from irritating properties. In counterextension it has no equal, as it does not move or slide after being applied. In addition to these general improvements, the Plaister being impervious to water wounds can be cleansed without removing the Plaister, obviating the necessity of constant re-dressing, saving labour and time. Heat applied to it renders it extremely adhesive. It is spread on strong cottou cloth, in 1-yard lengths, 7 inches in width, each roll in a separate box. Per dozen yards ..

MATHER'S

BLISTERING PLAISTER.

(WARRANTED TO BLISTER.)

This Plaister is fast hecoming very popular, being found perfectly reliable and very convenient, heing ready spread on Canton flannel

In One-Yard Lengths, 6 inches in width; each yard in a separate box. .. 48/-Per dozen yards ..

DIRECTIONS.—Out a piece of the required size, warm it a little, then apply the black surface to the skin, press the hand over it, and maintain it firmly with a bandage. It is recommended to ruh the part previously with a little alcohol or vinegar.

POROUS PLAISTERS, per doz.:—
Porous Plaisters, in Rubber Combination, in boxes of 2 dozen 2 6 Belladonna Porous Plaisters, in Rubber Combination, in boxes of 2 dozen Capsicum Porous Plaisters, in Rubher Combination, in hoxes of Strengthening, Belladonna, and Capsicum, each ..

PLAISTERS, ROLL

ы	B.T.O	TERO, M	μ	J, P	:1	ш	-						
	Emp.	Adhæsivum	£	0.5	1	0 1	Emp.	Hydrag.			£0	3	4
	,,	Ammon.		0	2	6	,,	Melliloti		٠.	0	1	4
	12	Ammon, c.	Hy-				33	Opii		٠.	0		-0
		drag		0	3	6	,,	Oxycroci		٠.	0	-	10
	,,	Belladonna A	lch.	0	5	0	,,	Picis		٠.	0	1	-0
	,,	Calefaciens			l	4	,,	Plumbi		• •	0		9
	27	Cantharid. B.				0	,,	Resinæ	• •	٠.	0	0	9
	,,	Cer. Saponis			2		99	Roborans		٠.	0	1	-0
	,,	Ferri					"	Saponis	• •	٠.	0	1	0
	,,	Galbani Co.				6	**	Thuris Co.		٠.	0	1	2
er	u othe	r description	of Pl	aist.	on	used	in P	harmacu or	Priva	te	For.	mi	lue

Every

made up in Kolls.			
PLAISTERS, POOR MAN'S:-	£		d
On Strong Twilled Cloth, per grs		16	- (
On Cloth, Second Quality, per grs., 11s. On Paper, per grs., 9s.			
PLAISTERS, BUNION:			
On Thick White Felt, oval, round, or square, per grs	0	6	- (
On III.	0	4	(
In round boxes, each containing 4 thick, per doz.	0	3	(
In square green boxes, containing 6 thin, doz. boxes	0	3	(
In square green boxes, hinged, containing 6 thick, doz. boxes	0	4	(

MATHER'S

SURGEONS' ISINGLASS PLAISTER. Spread on Fine Cambric. (Waterproof, and applied by Wetting.)

COMBINED QUALITIES .- Strength of material, it is nonirritating, very adhesive, susceptible to the slightest wetting, quickly applied, waterproof, applied without heat, does not spoil, warranted to keep good in any climate any length of time.

It is to be had in 5 and 1 yard rolls, 12 inches in width, each roll in a

separate box. In 5-yard rolls

.. per 5 yards, 5/0 ..., 1/3 " 1-yard

MATHER'S

FELT INDIARUBBER AND BUNION PLAIST

NO WARMING OR WETTING REQUIRED.

These Plaisters are made by an entirely new process, and possess considerable advantages over those at present in use.

It is generally admitted that the majority of Corn Plaisters now before the public do not give satisfaction, inasmneh as, in addition to other defects, they are not sufficiently adhesive and are liable to crack. These to which I desire to draw your attention conform quickly to the part, retain their adhesive nature, and are applied witbout either heat or moisture. They will also keep in perfectly good condition and are warranted not to crack.

In square White Enamelled Boxes, each containing One Dozen Plaisters.

PRICES: -3/- per gross, thin. 4/- per gross, thick. BUNION PLAISTERS (Same Make).

In square White Enamelled Boxes, each containing Six Plaisters, Assorted Shapes.

3/6 thin, 4/6 thick, per dozen boxes.
PLAISTERS, CORN:-
In round boxes, each containing 12 thick per dec
On Thick White Felt, per grs.
On Thin 0. 1.10
In round boxes, each containing 12 thin, doz. boxes 0 2 6
In square green boxes, each containing 19 thin day hoves a g
In square green boxes, hinged, each containing 12 thick, doz.
PLAISTERS. MATHER'S Arnicated Felt Corn and Bunion :-
On Thick White Felt, per grs
In round hower cook contains and in 119
In square green boxes, each containing 12 thin, doz. boxes 0 2 6 In square green boxes, each containing 12 thiu, doz. boxes 0 2 6
In square green boxes, each containing 12 thin, doz. boxes 0 2 6 In square green hoxes, hinged, each containing 12 thick, doz.
hoxes 0 3 6
PLAISTERS, CORN, on Leather:
I Interval in ld have now our
20.
Un Unamois, 2d., 4 thick per ges
white Felt, spread with Emp. Cerat. Sanonis per lb
y, Gourt Plaister, per lb
COURT PLAISTERS. Black Pink Skin or White Still was now
No. 1, 1d £0 6 0 No. 4, 6d £2 0 0
No. 2, 2d 0 12 0 No. 5 1e
No. 3, 3d 1 1 0 100, 13.
COURT PLAISTERS. Red leather cases, per gross :-
1 100 11 000 ±2 8 0 No 9 10
La corpo Hoander Cases, one dozen on a card per dozen 4 e 6 d
COURT PLAISTER. In varil rolls, 16 inches in milet, many
reduced sink, each roll in separate box, per yard :
Black, Best . £0 6 0 Pink, Medium £0 5 0
" Medium 0 5 0 , Common 0 4 0
", Common 0 4 0 Skin, Best 0 6 0 White, Best 0 6 0
35 3: () () ()
Common
Dinly Dant
GOT NET LOS
No. 1 £0 6 0 t In cases 1d
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
No. 3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
GOLDBEATERS SKIN. Six inches wide, per yard 25.

TERMS:-12½ per cent. discount at One Month, 10 per cent. ant. Special Quotations to Wholesale Buyers. Samples of the above sent on application. Three Months, current account.

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HULME, STREET, Manufactory-MANCHESTER.

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LONDON AGENTS-HARVEY, SHEPHERD & ASHTON, Charterhouse Square, Aldersgate Street, London, E.C.

MANCHESTER AGENTS-WHITEHEAD, HOLBROOK & CO.

ALL CHEMISTS. BY SOLD

SPONGES!

GOLD MEDAL AWARDED, BRUSSELS EXHIBITION, 1881,

R. CRESSWELL & CO.,

SPONGE MERCHANTS & IMPORTERS,

32 Red Lion Square, London;

AND AT PIRÆUS AND SMYRNA.

ESTABLISHED 1850.

The Finest Qualities and Shapes obtainable are quoted below, and the Prices are, without exception, THE LOWEST IN THE MARKET.

PRICES CURRENT OF SANDED AND SANDLESS SPONGES,

IN ORIGINAL CASES AS IMPORTED.

	HONEY-COMB SPO	ONGES.	Fine Turkey Sponges—continued.
		Pieces in Price case.	Pieces in Price case.
No.	Qlty.	case about. £ s. d.	No. Qlty. case about £ s. d.
1	1st Finest selected shapes, assorted		17 2nd Superior Cups, assorted sizes 110 12 0 0
	sizes	130 12 0 0	18 2nd Do. do 55 7 0 0
2	1st Do. do	75 7 0 0	19 2nd Do. Bath sizes 35 9 0 0
3	1st Do. do	45 4 0 0	20 3rd Fine Cups, assorted sizes 110 9 0 0
4	1st Small selected shapes	275 7 0 0	21 3rd Do. do 65 5 5 0
5	1st Superior do. large Bath sizes	25 7 0 0	22 3rd Do. Bath sizes 35 7 0 0
6	2nd Do. quality shapes, assorted	•	23 1st Turkey Solids, assorted sizes 115 7 0 0
	sizes	125 8 0 0	24 2nd Do. do, 110 5 10 0
7	2nd Do. do. do.	75 4 4 0	25 1st Flat Saddle, assorted sizes 55 9 10 0
8	2nd Good quality shapes, small	275 3 10 0	26 1st Do, do, 35 6 0 0
9	2nd Do. do. large Bath sizes		27 2nd Do. do 55 6 5 0
10	3rd Do. do. assorted sizes	145 5 5 0	28 2nd Do. do 35 4 0 0
11	3rd Do. do. do	90 3 10 0	
12	3rd Do. do. large Bath sizes	25 3 0 0	
13	4th For Stable use, &c	125 1 5 0	BROWN TURKEY SPONGES.

TOT Stable use, etc. 120 1 0 0 1st First selected assorted sizes 140 4

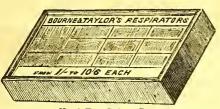
	H. I DI H	4.0183	KEY SPU) N (+ 1	1.5		- 1	43	18t Finest selected	, absorted bizes		110		10	U
		1010	de la contraction de la contra	,1101				30	1st Do.	do.	•••	75	2	15	0
14	1st Finests	elected Cup	s, assorted sizes	110	18	0	0	31	2nd Superior qualit	y, do.		140	3	3	0
	1st D		do.						2nd Do.	do.	•••	75	2	0	0
16			Bath sizes	35	12	0	0	33	3rd Slate quality,	do.	•••	350	- 1	1	0

The above may be had Sanded or Sandless, as required.

ALL COMMUNICATIONS TO BE ADDRESSED TO LONDON OFFICES.

RESPIRATORS.

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Quiniæ Sulphat. or Bi Sulphat. Pil., 3 grs. ,, ,,	12	6
Quiniæ Sulphat. or Bi Sulphat. Pil., 4 grs. ,, ,,	16	3
Quiniæ Sulphat. or Bi Sulphat. Pil., 5 grs. ,, ,,	20	4

We should be glad to have any of our Soluble Pills subjected to intelligent test, but as the medicine most in demand in pilular form is Quinine, we particularly court a critical examination of our Quinine Pills, and desire that they be subjected to the test either of analysis or of therapeutic effect.

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Plough Court, 37 Lombard Street, London, E.C., September, 1881.

ALLEN & HANBURYS.



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All Advertisements intended for insertion in the current Mouth must be sent to the Publisher of the Chemist and Druggist on or before the 12th, except Employers' and Assistants' Advertisements, which can be received up to 10 a.m. on the morning previous to publication.

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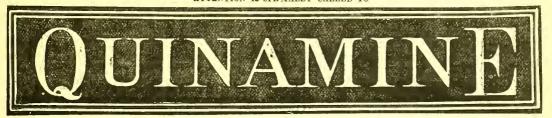
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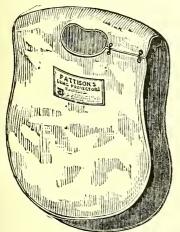
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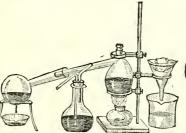
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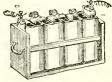
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F. A. SARG'S SON & CO.'S

CHEMICALLY PURE GLYCERINES

TOILET GLYCERINE ARTICLES.

Transparent Glycerine Soap,

In registered Packets of three Tablets, and in oval Tablets in paper. Warranted to contain 33% of the purest Glycerine.

Liquid Glycerine Soap,

Best preventive against chapped hands, and unrivalled for imparting softness to them, and rendering them clean and white.

See Testimonials of Professor J. von Liebig, Baron; and of Professor F. Wöhler.

Sarg's Double Distilled Glycerine, Chemically Pure,

In ½ lb. and 1 lb. Bottles, should have a place in every nursery on account of its salutary action on the heads of children, relieving them from dandriff, and the roughness of the scalp they are so commonly subject to.

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In Boxes of three Tablets, is highly recommended as a most effective disinfection.

GLYCERINE, CHEMICALLY PURE.

SARG'S DISTILLED CHEMICALLY PURE GLYCERINE, 29° Beaumé, in Cases of Four 56-lb. Tins each.

SARG'S DOUBLE DISTILLED GLYCERINE, Chem. pure, 30° Beaumé, in Cases of Four 56-lb. Tins each;

Twenty 5-lb. Bottles, Fifty 1-lb. Bottles, and 100 \(\frac{1}{2}\)-lb. Bottles, with Registered Label.

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SOAPS (in Bulk).

	_
Almond Brown and White Windsor	10
Brown and White Windsor	=
Curd	P
Curd Elder Flower Glycerine I and Almond Oatmeal Marshmallow	an
Glycerine	- 43
" and Almond	₩ E
Honey	~ 0
" and Almond	5 2
Oatmeal	- Ca
Marshmallow	9
Rose	10
Rose	720
Transparent Glycerine	+2

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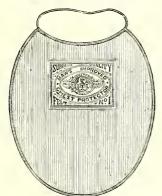
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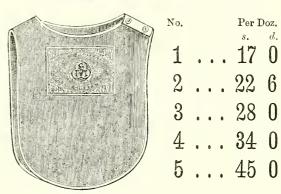
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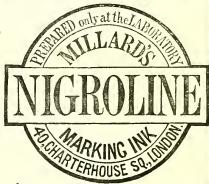
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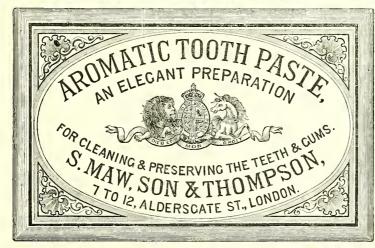
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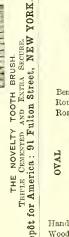




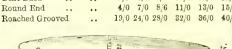




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The Defendant having published certain advertisements in which judgments unfavourable to the Plaintiff in the above suit have been paraded, the following Extract from the Judgment of Vice-Chancellor Bacon in respect to an issue arising out of the litigation is given as a contrast. Application was made to commit Mitchell for Contempt of Court. According to the report of Mr. W. H. Counsell, shorthand writer, 24 Chancery Lane,

THE VICE-CHANCELLOR SAID:

"With respect to MITCHELL, there is not a shadow of excuse for what he has done; on the contrary, as might be expected, there has been a submission and an apology by him, accompanied by a protestation that 'he did not think he was doing anything wrong.' Therefore, in my opinion, so far as MITCHELL is concerned, it is an undefended case, only made worse by the sort of lame excuse which is offered, together with the apology, which I dare say is sincere enough, because a man, when he has done wrong, is always ready to give an excuse for what he has done when he is convicted."

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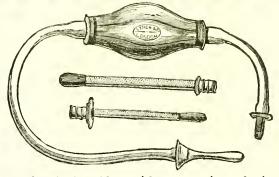
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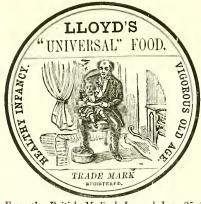
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and constipation.

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SILVER MEDAL,

International and Colonial

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STROUD, GLOUCESTERSHIRE, September 28th, 1881.

PREPARED BY THE AYLESBURI DAILY STROUD, GLOUGSTESHIRE, September 28th. 1881.

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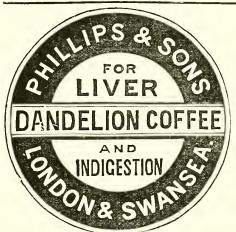
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Condy's Fluid, RED ... 1 0 size, 4/0 per doz. 8/0 20 4/0 ,, 16/0 Condy's Fluid, GREEN 0/6 3.6 1/0 7/0 2/0 ,, 14/0 Condy's Ozonised WATER 2/0 8/0 ,, 16,0 3/6

WHOLESALE DISCOUNTS OFF ABOVE PRICES FOR CASH IN 14 DAYS.

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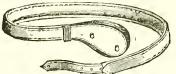
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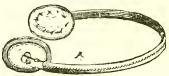
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			٦	rru	JSSE	s.						
		, single, a	s Fig.	1, ba	asil ar	d cha	amois or					
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	**	,,	27	doı	ıble, I	ig. 5	••		,,	3	0	0
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99	**	double	• •	• •		• •	• •		,,	0	13	6
Colcs's	Expired	double Patent, si	ngle		• •				**	0	5	6
**		., de	ouble				• •		22	0	10	6
Scrotal	Trusses,	basil and	cbame	ois 🖭	r mole	skin,	single	••	32	0	4	0
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SUSPEN	SORY	BAND	AGES					
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, double					99		10	
0220					37			

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39 99	,,	,	u	ouble	,,	U	- 1	0	
No.	SUSPE	NSORY	BANDA	AGES.					
1. Cotton Bags	and tape und	er-straps			per doz.	0	8	0	
2. Cotton Oxoni	an, with drav	wing-string		••	"	0	10	0	
3. Silk Bags and			• •	• •	,,,	1	1	0	
4. Silk Oxonian	, with drawir	ig-strings	••		22	0	18	0	
5	Bags bound	with elastic	с	••	**	1	4	0	

SUSPENSORY BANDAGES-continued.

6.		an, superior	quality.	bands	of	buff	iean with	
	drawing	g-strings .					per doz. £1	4
	Silk Bags,	to button on					,, 1	1
8.	"	**	,, uno	ler-strap	s to	butt	on ,, 1	4

ELASTIC STOCKINGS, KNEE-CAPS, ETC.

Manufactured ex port, and warran hot climate better in the Market.	ted to	stand a	Silk.			Super. Cot			otto	on.	. Snr Cot		
Stockings Knee-caps Calf-pieces Socks Wristbands Knee Stockings Belts, to draw on	••	per pair,,,,eacb		s. 9 6 7 5 2 16 16	d. 6 6 0 6 2 0 6	\$. 14 10 9 8 -4	$d. \\ 2 \\ 0 \\ 6 \\ 0 \\ 2$	£ 0 0 0 0 0 0 0	5. 5 3 4 3 1 9	d. 6 8 4 6 6		5. 6 1 5 5 4 2 12 12	

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7			8 18
0			per doz. per doz. per doz. per doz. per doz. per gross ordered. per gross per gross per gross per doz.
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8	Ö		Lawton's Absorbent Cotton "Murray & Lamman's Florida Water Replet Extract of Malt. "" with Col Liver Oil "" 1½ lb" "" with Col Liver Oil "" 1½ lb" "" with dropper and prize in Quantities of Malt. "" with Col Liver Oil "" 1½ loors boxes and With Chars's Adme prized on when 3 gross and Fineters, Porous Improved American, in 2 doz. boxes with With Chars's Adme prized on when 3 gross and Fineters, Porous, Dr. Grosvenor's Belanodyne, in 2 doz. ho Symes' Lac Bismuthi "" and Cerii "" and Cerii "" "" "" Therinal Bright (Harrison's) "" Urethnal Irrigator (Harrison's) "" Chlorate of Potash 5 grs. 35 i "" "" 100 i" "" 5 grs. 100 i" "" i"
	A		Torida Water pecial Prices in Large Quantity (Special Prices in Quantity (Special Prices in Quantity (Squeet American, in 2 doz. b. And American, in 2 doz. b. osvenor's Bellanodyne, in ind Cerii it it it it it it it it it
Ш	7		Absorbent Cotton """ "E Lamman's Florida Water tract of Malt. """ "with Cod Liver Oil """ "Porous, Dr. Groesial Prices in Quantitie Porous, Dr. Grosenor's Bellanodync, in to Bismuthi """ """ """ """ """ """ """
\geq	s, U		& Lamman's Flo & Lamman's Flo & Lamman's Flo & Lamman's Flo Reproved the provection of the control of the c
0	ISI		Lawton's Absorbent Cotton *Murray & Lamman's Florida Water Repler Extract of Malt *Packer's Pine Tar Soap (Special Prices in I With Cot Live: Plasters, Porous, Dr. Grosvenor's Belian With Chemist's Acome printed of Plasters, Porous, Dr. Grosvenor's Belian Symes' Lac Bismuthi "" urethral Irrigator (Harrison's) WYETH'S COMPRESSED TABLETS. "" Chlorate of Pot. "" Chlorate of Pot. "" " " " " " " " " " " " " " " " " "
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7	5 K		ing) 2. Less than 1 doz. 1 doz. to 3 doz. 2. R. 72. 66s. 3. 73. 66s. 3. 74. (Ovoid) CAPSI The British Pharmacopæia and Bregin Gub. B.P. Ferri Gub. B.P. Frem Carb. B.P. Bydrarg. Lold. B.P. Frem Colone. B.P. Frem Colone. B.P. Frem Colone. B.P. Frem Colone. B.P. Frem Carb. B.P. Frem
4	0		with Quinine "Efferescing) Betail. Less than 1 doz. 1 doz. 7 2 2 66 "MacK. & R." (Ovoid) C. range 7s. Toy. Good be griftly Pharmacopei gr. Ferri choule of the British Pharmacopei gr. Ferri choule of the British Pharmacopei gr. Ferri choule Gt. B.P. Hydrag, Iod. Nur. Iodoform 5 gr. Morpbia Hydrochlor. 5 gr. Iodoform George Goop. Comp. 1 6 gr. Hydraghorus and Nux Yomica. 5 gr. Phosphorus and Nux Yomica. 5 gr. Phosphorus and Nux Yomica.
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7	Ω		with Quinine "Fervescing) "Retail. Less Large 7s. KCCK. & R. R. KTCK. & R. Tange 7s. "Ack. of the Drist legent of the Brist legent l
2			Myine "" with "" Be "" Be "" Larg "" McK "" Agr. "" 5gr.
SURROUGH	7		his Beef and Iron Wine """ Hazeline """ Ammonia Inhaler """ Ammonia Inhaler """ Ext. Nux Vomica """ Tincture Press Tincture Press Tincture Press Retail Less than 1 doz. 1 doz. to Targe 7s. Tincture Press Retail Less than 1 doz. 1 doz. to Gostrine B.P. According to Formulæ of the Dritish Plarmacopæia the B.P. According to Formulæ of the Dritish Plarmacopæia the B.P. According to Formulæ of the Dritish Plarmacopæia the B.P. According to Formulæ of the British Plarmacopæia the B.P. According to Formulæ of the British Plarmacopæia the B.P. According to Formulæ of the British Plarmacopæia the B.P. Brent Captum Hyprin B.P. Sgr. Hydrarg. Iod. Rib. Hydrarg. Iod. Rib. Theac comp. B.P. Colocynth and Hyoscyamus Colocynth and Hyoscyamus Sgr. Amonbromide Comp. B.P. Sgr. Hydrarg. Iod. Rib. Hydrarg. Theac comp. Pluy. Theac comp. Pluy. Theac comp. Pluy. Theac comp. Driv. Amonbromide Sgr. Amonbromide Br. Amonbromide Doinn (Plummer's) Theac comp. B.P. Sgr. Amonbromide Br. Amonbromide Doinn (See Soup Comp.) Doinn (See Soup Comp.) Doinn (See Soup Comp.) The Capstal Indone Doinn Hydrarg. The Purc, Capstal The Capstal
5	500	133	Beef and Iron "" "" "Ammonia Inha Anmonia Inha trate of Caffein "The Caffein "The The Press "The According to F "The According
8	40 .0	13.	Burroughs' Beef and Iron Wine """ """ """ Hazeline """ Ammonia Inhaler """ Enterprise Drug Mill """ """ """ Tincture Press """ According to Formulæ of the Aloes, Diug Syr. Hypophos According to Formulæ of the Aloes, Diug Mill Aloes, Scootrine, B.P. Aloes, Bootrine, B.P. Aloes and Assaftetida, B.P. Aloes and Arguer, Prill Assaftetida Comp. B.P. """ Caloin Sulphid """ Assaftetida Comp. B.P. """ Caloin Sulphid """ Assaftetida Comp. B.P. """ Caloin Sulphid """ Digralin, Puro, Crystal Ext. Colocynth, Comp., B.P. "" Digralin, Puro, Crystal Digralin, Puro, Crystal "" Brt. Colocynth, Comp., B.P. "" Digralin, Puro, Crystal "" Brt. Colocynth, Comp., B.P. "" Digralin, Puro, Crystal "" Brt. Colocynth, Comp., B.P. "" "" Brt. Ploes Brt. Colocynth, Comp., B.P. "" "" "" "" "" "" "" "" ""
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At the Adelaide International Exhibition of 1881.

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BEWLEY & DRAPER, Limited, DUBLIN. See "CHEMIST AND DRUGGIST," December 15th, 1874.

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[2.]



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The trade of the country, as indicated by the official reports, continues to expand satisfactorily, both as regards exports and imports.

The French and German delegates at the late International Pharmaceutical Congress are carrying on a lively paper war, the quarrel having been set going in earnest by M. Méhu's letter in our last number. This month we publish another letter from M. Méhu, and also a reply to his former one from M. von Waldheim, of Vienna, the President of the Pharmacopæia Commission.

The Pharmaceutical Council have taken into consideration the dangers attending the too easy sale of chloral hydrate, and the Law Committee is asked to report what steps, if any, should be taken.

The Council have received an application from the Pharmacy Board of Victoria asking them to consider the possibility of arranging reciprocity for the certificates of the societies there and here. The British Council, however, reply that they have no legal power to do this, a fact which was known before; they were asked to consider whether such power could not be provided for.

We regret to notice that Mr. Frazer has resigned his seat on the Pharmaceutical Council.

The Chemists and Druggists' Trade Association having prosecuted an unqualified person under the 17th section of the Pharmacy Act, offered their evidence to the Pharmaceutical Council in case they might wish to prosecute under the 15th section. The offer was accepted, and a penalty was recovered. The Association also undertook, after inquiries, to defend a member threatened with a prosecution for having sold arrowroot not of the nature, substance, and quality demanded. The prosecutors have since asked permission to withdraw from the prosecution, and the defendant, wishing to avoid litigation, has consented.

On pages 473-4 will be found reports of the London, Edinburgh, Sheffield, and Preston Societies of Pharmaceutical Assistants, showing a gratifying activity among the juniors of those districts. Elsewhere we report an equal activity in another direction, the Pharmaceutical Football Club having defeated another team on Primrose Hill on Saturday last.

The cultivation of sponge has been successfully carried out in Florida, a piece 7 inches in diameter having been grown from a 2-inch cutting in seven months.

The proprietor of the business of Day & Martin in London is not the possessor of either of those names, but Mr. Justice Chitty has granted him an injunction against two persons at Southsea, actually named Day and Martin, who had taken to the blacking manufacture.

We publish the first of a series of letters on pharmacy in Australia. The wholesale trade, and all who wish to cultivate trade in those Colonies, will do well to watch these letters, as they will be pretty sure to contain information which can be turned to good advantage.

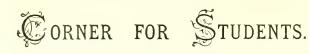
Dr. Milner Fothergill continues his remarks on Artificial Digestive Agents on page 475, commenting this month on the use of malt extracts.

On page 483 will be found much pharmaceutical information gathered from the report of the American Committee for the revision of the United States Pharmacopeia. In this and in an article yet to appear we give most of the more generally useful formulæ of that important work.

The Chemists' Aërated and Mineral Waters Association (Limited) have made a profit of something like 800% on their year's business, but they have had to considerably ircrease their plant, and, in addition, they have sunk in advertisements (and charged to "preliminary expenses") a sum of about 1,300%. Clearly their business is likely to be a prosperous one, but they are trying to carry it on with too little capital, and of course they cannot yet declare a dividend.

Mr. Schacht, in his opening address as President of the British Pharmaceutical Association (printed on page 479), made some excellent remarks on pharmaceutical competition. He showed clearly how beautifully all pharmacists might get on without "eating each other"; but his theory, unfortunately, requires the preliminary failure of all who cut prices. He hopes that the demand for pharmacists may so increase that in five years two may flourish where one now exists. Probably Mr. Proctor would like to see that result too; but a problem has to be dealt with, not with conditions as we would like to have them, but as they are actually given.

Before the Glasgow Chemists and Druggists' Association on November 2, Mr. J. Walker read a paper on the "Patent Medicine Trade," which we print on page 476. Partly from moral and partly from commercial considerations, Mr. Walker urges the limitation of the trade as much as possible, and he advocates agitation for a system somewhat like that of France, providing certain officers to approve of patent medicines before they are allowed to be sold. That such a system has some very marked advantages is obvious, and it is likely that its introduction here would be supported in certain influential quarters; but Mr. Walker's paper would have been more effective if he could have given information as to its working in France. Our own impression is, that the medical specialty trade is far more extensive, and is more injurious to the genuine trade of the pharmacists there than here. The subject is, however, worthy of discussion.



CONDUCTED BY RICHARD J. Moss, F.C.S.

QUALITATIVE ANALYSIS.

THE subject of the next exercise will be a mixture of salts. The mixture is to be submitted to a thorough systematic examination designed to detect its constituents and to demonstrate the absence of all other substances. Students are required to send a complete report of the analysis. A list is to be given of the metals and acid radicles detected, distinguishing those which may be regarded as accidental impurities.

Applications will be received up to November 19, and portions of the mixture of salts will be sent to applicants on the 25th,

Students' papers will be received up to December 15.

REPORTS

The mixture of salts which formed the subject of the last exercise consisted of equal parts of sodium chloride and ammonium chloride; it contained traces of calcium, magnesium, and potassium, with the sulphuric radicle.

The preliminary examination of this mixture in the dry way sufficed, with very little trouble, for the detection of both sodium and ammonium; it remained only to demonstrate that no other metals were present, and to ascertain with what acid radicles they were combined. portion of the mixture was heated in a tube closed at one end, a sublimate formed in the cooler part of the tube, and a residue remained, which fused at a high temperature, and on cooling solidified to a white crystalline mass. This operation divided the mixture into two portions, one volatile and the other fixed. The separation was so easily and completely effected that the student, by examining the two portions separately, could distinguish with certainty the nature of the mixture. Of course the volatile portion need only be examined for volatile substances, which greatly simplified this part of the examination. All the impurities that were present remained with the fixed residue, and they were more easily detected in the presence of only half of the original saline matter. It occasionally happens that a circumstance of this sort affords an opportunity for separating the constituents of a mixture, and the student should not neglect to take advantage of it. Separation by sublimation may be very conveniently effected on the small scale in a piece of ordinary glass tube. When the volatile portion has been completely removed from the fixed portion by heat, the tube may either be softened between the two portions and drawn out, or it may be allowed to cool, and the closed end with its contents broken off. The former method is less likely to disturb the contents of the tube. Sometimes, in the course of a preliminary examination, a small sublimate is obtained, and frequently this is the result of a decomposition of the substance under examination. In such cases it by no means follows that the proper course to pursue is to examine the sublimate and the fixed portion separately; indeed, in the majority of cases this would be an unnecessary complication. But when the substance to be examined is obviously a mixture of salts, which it is sought to identify, it is clearly desirable to take advantage of any physical property which admits of one or more of the salts present being removed. The detection of the trace of potassium present was effected by evaporating the solution to be examined to dryness, and igniting to expel ammonium salts. The residue is then dissolved in the smallest possible quantity of water, platinic chloride added, and as no precipitate appears immediately,

the mixture is evaporated almost to dryness on the water-bath and the residue treated with spirit of wine, which dissolves sodium chloride and chloride as well as the double salt which these two substances produce. If, however, potassium is present, the potassium chloro-platinate formed will remain undissolved in the form of a bright yellow crystalline precipitate. The detection of potassium by means of the flame colouration is of course most readily accomplished with the aid of a spec troscope, but even with this useful instrument the presence of a large excess of sodium is a source of much inconvenience. The characteristic lines of potassium are either obscured or greatly reduced in brilliancy by the strong yellow glow of incandescent sodium vapour. If the cobalt coloured glass is the best means at the disposal of the student for effecting the optical analysis of the light, ever less perfect results are to be expected, and the conclusion arrived at may be altogether erroneous, unless the studen has tested the capabilities of his blue glass by examining the coloured light emitted by mixtures of sodium and potassium compounds in different proportions.

PRIZES.

The First Prize for the best analysis has been awarded to ROBERT WRIGHT, 45 Spring Gardens, Buxton.

The Second Prize has been awarded to DONALD GRANT Fortune's Well, Portland.

Marks Awarded for Analyses.

Robert Wr	ight (first į	orize)			 	100
Donald Gra	ant (se	cond	prize)			 	 96
John F. Cr	oshaw					 	 85
Antrim			• •		• •	 	 89
W. Miller						 	 75
Crosshow						 	 65
Prospect				• •		 	 60
Tycho Bral	lie		• •			 	 55
J. Wood						 	 £1)
E. J. Evan	S.,					 	 50

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific hook that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

** All Communications should include the names and addresses of the writers.

R. Wright.—Your work is most creditable. The darkening to which you refer would appear to be due to traces of organic matter. The minute particles of fibre from filter paper is quite sufficient to account for it.

D. Grant.—It is by no means remarkable that the potassium reaction was obtained with difficulty, as the quantity present was small.

J. F. Croshaw.—The indications of potassium which you obtained with the blue glass appear to have been more marked than one would expect under the circumstances.

Antrim.—We caunot explain your results with calcium chloride, having tried the experiment and failed to obtain any precipitate.

W. Miller.—This analysis was a good illustration of the importance of the so-called preliminary examination. The information obtained from a few very simple operations in the dryway was of the greatest importance.

Crossbow.—The most important part of this analysis was that which you omitted altogether—the examination in the dry way.

Prospect.—It was a grave omission not to observe the sublimate produced when the substance was heated in a time; moreover, you neglected to test for ammonium.

Tycho Brahe.—We are pleased to make the acquaintance of so eminent a philosopher. You state that on the addition of hydrochloric acid to effect was observed, yet carbonic acid was expelled when sulphnric acid was added, and harium carbonate precipitated on the addition of barium chloride to the aqueous solution. If you will allow your attention to be diverted for a moment from the study of the heavenly hodies, it may strike you as strange that the eartbly carbonates should behave in this

J. Wood.—In dissolving substances in water a sort of effervescence is frequently observed. This is due to the disengagement of the air that atheres to the snrface of the solid, or is contained in its cavities. Sometimes, also, the pheromenon is due to the expulsion of the air or gas dissolved in the liquid. 100 volumes of water at 4°C. contain 3:23 volumes of dissolved air; many salts in dissolving expel a large part of this dissolved air. It is difficult to follow your notes; it would be better to give your results in a tabular form showing the treatment of each group separately.

Pharmacalia.

PHARMACEUTICAL EVENING MEETING.

In the days when Louis Philippe was king of the French, the inhabitants of the city of Paris were minded to add an establishment for the sale of oysters to their other public buildings. This was called la Halle aux Huitres, and was opened with some pomp and ceremony. But it so happened that though the civic authorities were present, and the market was declared officially to be open, the oysters which were indispensable to success, had not arrived. Hence that same night, a song was produced at the Palais Royal, and sung next morning by the populace on the Boulevards, in commemoration of the event. The refrain ran thus:—

Mais puis-qu'on a fait un marché aux huîtres, Aujourd'hui il faut faire des huîtres pour le marché. Now since they provide us a place where to sell, They had best manufacture some oysters as well.

A mournful appeal has reached us, in common with other possible contributors, respecting the condition of our evening meetings. The Society's rooms are thrown open once a month, and the arrangements are perfect, but visitors and original contributions are both wanting. It seems desirable to manufacture papers to be read, and members who may The President, Mr. Thomas listen to their contents. Greenish, has issued an effective circular entreating more liberal assistance, and calling upon the members generally to remedy this undesirable position of affairs. Never was there greater need for such a stimulating communication than at the first meeting of the re-opening of the session. Yet we would ask our officials not to be too disconsolate; nor to imagine that a paucity of attendants or of papers is peculiar to the Pharmaceutical Society. Those who frequent scientific gatherings know how often a similar state of things occurs. The stream of productive energy cannot and does not flow on perpetually even when the special object of research is far wider in its scope than that of pharmacy. Let there be no Darwin paper at the Linnean, no series of experiments by Sir John Lubbock, and no elaborate communication from George Bentham, and it is wonderful how the Fellows find other attractions than the lecture-room at Burlington House. The fluctuation to be observed amongst all other learned bodies is identical; and we have formed one of twelve at a Royal Society in Trafalgar Square when there was a bishop in the chair, and almost every man present held a distinguished name in literature. In one respect our own Society might take a lesson from outside. We stand alone in the persuasion that our deliberations must last out till a certain given time. With us the allotted hour of ten o'elock must be attained somehow, or else we are supposed to have met in vain. No such necessity embarrasses other learned bodies. A short agenda means a short meeting, occasionally not longer than thirty minutes; a circumstance which is accepted with resignation by the Fellows, who cheerfully adjourn to their tea and coffee. We admit that there is room for improvement in our Evening Meetings; but, while we heartily admire the circular which has come to hand, and hope that it may produce excellent results, we do not want our President to feel discouraged. Reference to continental journalism will show, that, deducting the large subject of a new Pharmacopæia, we are no worse off than our foreign neighbours

A DISPENSING DIFFICULTY.

The question brought before the last meeting at Bloomsbury Square raised the old and difficult discussion as to what

the dispensing pharmacist should do when called upon to prepare a prescription in which incompatible substances were ordered to be mixed: which substances, moreover, following the strict instructions of the formula, could not be exhibited in divided doses: and which, owing to their potent character, might, in an accumulated dose, lead to dangerous results. The case was presented fairly and dispassionately by Mr. Martindale, and he attacked the matter in a philosc. phical spirit. The mixture under examination contained tincture of cinehona, corrosive sublimate, potassium iodide, spirit of chloroform, and quinine sulphate. Were these ingredients really incompatible? Could any ingenious method of dispensing be adopted so as to surmount a seeming difficulty? This, we are of opinion, was the only wise course to take, and by a succession of direct experiments Mr. Martindale set this portion of the case at rest. Now, supposing circumstances utterly prevented an appeal to the physician, what was the duty of the pharmacist? Here is a prescription which does not come within the rules of ordinary dispensing-it is beyond those rules and must be dealt with according to its own merits. The mode of dispensing such a particular prescription, and conduct relating to that dispensing, can afford neither precedent nor argument by which to regulate any other case. A pharmacist is not bound by anything inherent in his calling to forego the exercise of common sense, judgment, or responsibility. Circumstances happen to him as to other men, when all three are required from bim. He has no right to endanger the life of that patient who certainly has been committed to his care. Two ways are open-if, unprepared to introduce a sensible alteration, he may refuse to dispense the formula; if his common sense and judgment suggest to him a skilful alteration by which the intention of the physician may be secured and risk prevented, he is bound not to shirk the responsibility of making that alteration. He will be thanked by the prescriber (access to whom is assumed to have been impossible for the moment) for the intelligent watchfulness the dispenser has displayed. But what are the limits of this power of alteration? Who shall say where they begin and end? Professor Redwood felt this and said: - "The great diffi. culty he felt in the way of sanctioning any deviation from the strict instructions given in the prescription was mainly this, that it was opening a door to alterations the exact amount of which it would be very difficult to fix. were they to draw the line, and say in such a case the dispenser would be justified in making certain alterations from the prescriptions. If they allowed of that being done, and of the dispenser exercising his judgment, in a variety of cases he might say this mixture would be vastly improved if such and such an alteration were made, but to act on such a suggestion was obviously inadmissible." On the second count we have not a word to offer, for no pharmacist, under any pretence whatever, has the right to introduce fancy improvements of his own. That is not a point under consideration. The argument refers solely to a prescription containing incompatible ingredients, containing potent drugs, the exhibition of which, in improperly divided doses, might prove fatal to the patient - appeal to the prescriber being from circumstances impossible We submit, that no one ex-cathedrâ, can advise or sanction in the matter; and that were the Pharmaceutical Society to attempt to lay down any rule for guidance, it would compromise its position, and at the same time leave the whole difficulty unsolved. But what a corporate body cannot do, an individual dispensing chemist can. An immediate personal difficulty confronts him, which he must meet in an immediate, and personal way. Then comes the momentous question-am I competent to decide this point? Are my

pharmacy, chemistry, and experience up to the standard? Can I say confidently, this physician's order cannot be executed as it stands, and the life of the patient is in danger? If such be his conviction (and it can he that of no unexperienced assistant), then let him use his own common sense, judgment, and feeling of responsibility. That is the limit of alteration: the exact point where it begins and where it ends. There is a fine issue to these considerations. We have all heard of historic houses, and we are aware that they do not experience a tenth of the difficulty felt by less known establishments with regard to dispensing matters. Accident does not make houses historic; it is a long course of uniform skill and accuracy which has gained for them in an extraordinary degree the confidence of the public and of the medical profession. Their word becomes a sort of law, and they are scarcely credited with the power of making a mistake. Physicians of eminence consult them now and then as to the proper mode of writing a prescription, and award to them an unusual margin of suggesting alterations; while the most timid patient trusts himself in their hands. We cannot severally belong to these ancient firms, but we can each become historic individuals. Let the dispenser once gain the personal reputation of being an accomplished pharmacist, and a cloud of his minor troubles will disappear: and in the instance so well brought forward by Mr. Martindale, he may act to the best of his ability and discretion without fear that either will he too severely criticised.

A CASTOR OIL SUBSTITUTE.

So far back as 1849, Mr. Alexander Ure investigated the purgative properties of the Oil of Anda. The specimen with which the experiments were tried had not been freshly prepared, and had indeed been long regarded as a curiosity. Twelve ounces were alone available, and it was a yellowish oil, quite bright, about the consistence of oleum olivæ, devoid of smell, and free from the viscid qualities of castor oil. There was a small supply of Anda fruits differing a good deal in appearance one from the other, hut we are not aware whether these were utilised, and the oil expressed; as far as our accollection serves, the subject was abandoned. It was known that the natives of Brazil used the seeds as an efficient purgative in doses of from one to three, and it was in contemplation to introduce this remedy into England, though it was by no means certain that under distinctly different climatic influences equally heneficial results might be expected. Mr. Urc determined, by actual experiment, to ascertain the value of the oil in his own hospital practice. He found that small doses were better than larger ones, and in several reported cases it appeared that twenty drops administered on sugar proved successful. Oil of Anda-açu, or assu, therefore, would stand mid-way hetween ol. ricini and ol. crotonis. These researches seem to have heen limited to the original sample, although the results obtained would appear to justify a more extended trial. M. Mello-Oliveira, of Rio Janeiro, has endeavoured to bring the remedy into notice under the name of "Huile d'Anda-Assu," and possibly may not have been acquainted with the attempt to introduce it into English practice. He describes the anda as a fine tree (Johanesia princeps, Euphorhiaceæ), with numerous branches and persistent leaves, growing in different parts of Brazil, and known under the name of "Coco Purgatif." The fruit is quadrangular, hilocular, with two kernels which on analysis yield an active principle for which the name "Johaneseine" is proposed. This is a substance sparingly soluble in water and alcohol; and insoluble in chloroform, benzine, ether, and hisulphide of carbon. Evidence derived from experiments with the sulphate of this principle did not give uniform results: one

opinion being that, contrary to the view of many Brazilian physicians, this salt had no toxic effect on either men or animals. Local medical testimony, however, was entirely in favour of the oil. Dr. Torrès, professor at Rio Janciro, using a dose of two teaspoonfuls, had been successful. Dr. Tazenda had obtained excellent results, and Dr. Castro, with a somewhat larger dose (3iiss), was even enthusiastic in its praise. It might therefore he desirable at a time when new remedies are so much in vogue, not to abandon altogether a Brazilian medicament, the value of which is confirmed both by popular native use, and by professional treatment. M. Mello-Oliveira comes to the conclusion that oleum anda assu (or açu) may he employed wherever easter oil is indicated, and with these distinct advantages: first, that its dose is considerably less; secondly, that it is free from disagreeable odour and pungent taste; and thirdly, being sufficiently fluid, it is not adherent to the mouth so as to render it nauseous to the patient. In this short abstract the spelling of the French original has been retained; as this therapeutic agent claimed attention thirty years ago, and has again heen deemed worthy of notice in scientific journals, some of our enterprising pharmaeists might be inclined to add it to the list of their commercial ventures.

HIGHER PHARMACEUTICAL QUALIFICATION.

Just hefore our Parisian friends honoured us in London with a visit, their Society of Pharmacy held a meeting (or rather two), under the presidency of M. Potit, when it was agreed to suhmit the following resolutions to the minister:—

- 1. There shall be but one professional diploma for the exercise of Pharmacy.
- 2. The Baccalauréat (= B.A. title), shall be required. The Society of Pharmacy would accept the Baccalauréat ès Lettres, with the Baccalauréat ès Sciences (limited), but in its opinion the full Baccalauréat ès Sciences would better meet the requirements of ulterior study.
- 3. The diploma of Pharmacien shall confer all professional rights throughout the territory of the French Republic.
- 4. There shall be created a higher diploma, purely scientific, given by the Superior Schools of Pharmacy raised into Faculties, conferring the title of Doctor of Pharmaceutical Science, to be required for le concours d'agrégation (= Fellowship examination), and professorial candidature.

No advantage would be gained by reporting the discussions which arose upon these points, for British Pharmacy loses nothing by being worked out on British principles. Still we are not alone in maintaining that there is one defect in our regulations. We are unjust to the man who passes his major examination, for we give him no special and distinctive title which can be recognised by the non-pharmaceutical world. The wording of that which he can claim at present is so faintly marked off from the lower grade as to render the distinction nebulous.

The French have acted boldly in accepting "Doctor of Pharmaceutical Science" as a sufficient mode of recognition, though the retention of the old University Doctorship, as an indispensable qualification for the Professorial chair was hotly contested. Our Professors are elected in a different way, and are generally recruited from other Professional circles—but, as regards our internal economy, we sorely need some special title of honour with which to reward those who pursue their studies heyond the mere exigencies of trade.

A PARCEL POST is now in operation in Paris. Packets are not to exceed three kilogrammes, or a little over $6\frac{1}{2}$ lbs., the charge for which is fixed at 25 centimes, a fraction under $2\frac{1}{2}d$. In case of loss or damage, the sender is to he entitled to compensation not exceeding 15 francs.

The Pharmaceutical Council.

NOVEMBER 2, 1881.

MR. T. GREENISH, President, Mr. G. F. Schacht, Vice-president. Of the rest of the Council, Messrs. Bottle,

Frazer, Richardson, and Young were absent.

After reading the minutes of the last meeting, Mr. Butt laised a discussion on the description of himself and the President as "delegates" to the meeting of the German Pharmaceutical Society at Heidelberg. The President agreed that they had not been delegated, and the word "visitors" was substituted.

THE LATE MR. BOURDAS.

A letter from the son of the late Mr. Bourdas was read, expressing on behalf of himself and sisters their thanks for the sympathetic and appreciative letter of the Council in reference to their late father.

ABSENTEES.

Letters from Messrs. A. Bottle and J. Young were mentioned, stating that in consequence of colds they would not be able to be present at this Council meeting.

RESIGNATION OF MR. FRAZER.

The President read a letter from Mr. Frazer, tendering his resignation as a member of the Council. He had only taken that step after much consideration, and with much regret, and he expressed the pleasure he had taken in attending the Council meetings during the past ten years. The President had not yet had time to write to Mr. Frazer to ask him to reconsider his determination, but he had been given to understand that any such application would not be of any use.

Mr. WILLIAMS said he believed Mr. Frazer's reason for resigning was that on account of his wife's health he would be living at some distance from Glasgow, and would, consequently, find it very inconvenient to attend the Council meetings, especially during the winter.

It was understood that a member in the place of Mr. Frazer would be elected at the next meeting of the Council.

THE NORTH BRITISH BRANCH.

Letters were read from Mr. Stephenson, the Chairman of the North British Branch, and from Mr. P. McEwan, the newly appointed Secretary, acknowledging the votes of last month.

THE HANBURY MEDAL.

A letter from Professor Flückiger was read, expressing his appreciation of the honour done him in conferring upon him the Harbury Medal, which had reached him.

NEW MEMBERS

Were elected and several persons restored to their former status in the Society on payment of fines. Certain associates and apprentices were also elected. The names of the following persons were restored to the register of chemists and druggists on payment of a fine of one guinea:—

J. T. Morton, The Strand, Derby.

J. Stevens, Victoria Street, Christchurch, New Zealand.

THE FINANCIAL REPORT

For the past month was read and adopted without comment.

THE BENVOLENT FUND.

The Committee recommended four grants of 5*l*. each to various applicants, and a grant of 10*l*. for the Secretary's Casual Fund, which was reported to be exhausted. The consideration of several other applications was deferred for inquiries. The report was adopted.

LIBRARY, MUSEUM, LABORATORY, AND HOUSE.

The report of this Committee included particulars of attendance in the library and museum, donations, and other additions to both. The Librarian's report of the recent meeting of the Library Association in London was read, and also a letter from the Pharmacy Board of Victoria, detailing the require-

ments for pharmaceutical qualification in that colony, which comprised a four years' apprenticeship, a preliminary examination identical with that of the Pharmaceutical Society of Great Britain, an examination at the Melbourne University, or other school or college recognised by the Board, in elementary and practical chemistry, materia medica, and botany, and a final examination before the Pharmacy Board in practical pharmacy, undertaken when the candidate has served his apprenticeship and attained the age of 21 years. The nature of the study and the examinations required being of a high standard, the Pharmacy Board of Victoria in this letter asked the Pharmaceutical Society of Great Britain to take into consideration the subject and conditions under which the Victorian and British certificates might become interchangeable. The letter was signed by Joseph Bosisto, President, and Harry Shillinglaw, Registrar of the Victorian Board. The Committee reported that the Registrar had no power to place names on the register except on certificates from the Boards of Examiners in Great Britain.

A part of the report of this Committee was read in the

absence of the reporters.

The Council adopted the report.

GENERAL PURPOSES COMMITTEE.

The report of this Committee, which was as usual read in committee at Council, contained the solicitor's regular report. Penalties and costs had been pid into Court by the following, against whom actions had been brought:—James Marcham, Chester; J. A. Badey, Nottingham.

THE INTERNATIONAL PHARMACEUTICAL CONGRESS.

The report of the Committee appointed to make arrangements for the Congress was read. Reference was made to the resolution of the Council to publish a complete record of the proceedings of the Congress to be presented to all the delegates who attended the Congress. Many letters had been received from visitors to the Congress expressing their gratification with their reception. Official letters had also been received from 11 societies of pharmacy acknowledging the reception of their delegates. Mr. R. Bremridge, who read the report, said these would be printed; should he read them then?

Mr. Williams asked if any of the letters contained complaints. He had observed that some of the French delegates

were not quite satisfied.

Mr. R. BREMRIDGE said all the letters were complimentary. The letters were not read, but they have since been pub-They were from the Pharmaceutical Societies of Louvain, Paris, Belgium, Brussels, Germany, Hainault, Ireland, Charleroi, Austria, Denmark, St. Petersburg. The Pharmaceutical Society of Paris express thanks "for the cordial and magnificent reception of their delegates." General Pharmaceutical Association of Belgium were "full of admiration for the organisation and the way the programme was carried out." They hope "that the amicable feelings between the two nations may continue to improve." The German Apotheker Verein considered "that it was only through the excellence of the arrangements and the able manner in which Professor Redwood presided that the Congress was able to accomplish in so short a time so much work, that will be attended with important consequences for pharmacy." The Austrian Apotheker Verein telegraphed their thanks. The St. Petersburg Pharmaceutical Society remarked that "the perfection of the organisation alone enabled the Congress to arrive at results so important for pharmacy." The Society expressed pleasure "in extending the haud of friendship to its sister society in the sea-girt

The report as submitted by the Committee concluded by referring with regret to the reports of the Congress which had been published in French journals by Messrs. Patrouillard and Ferrand, and particularly to the grave charges which had been made in a letter to THE CHEMIST AND DRUGGIST by M. Méhu, and a paragraph was devoted to a reply to the latter. The Council discussed this paragraph in committee for an hour, and then decided to omit it from the report, which they otherwise adopted.

Mr. BUTT, in moving the adoption of the report, said that having audited the accounts he might say that the liberal contributions which had been made towards the entertainment fund had enabled the committee to defray all the

expenses, and he helieved that when the accounts had been finally settled there would he a small halance to hand over to the Benevolent Fund.

THE SALE OF CHLORAL HYDRATE.

The Council went into committee to consider a notice of motion given by the President, with regard to the sale of chloral hydrate.

On resuming, the following resolution was passed unanimously:—

That the Law and Parliamentary Committee, in consideration of the frequent deaths occasioned by the use of chloral hydrate, a poison within the meaning of the Pharmacy Act, be requested to consider and report what steps, if any, should be taken with a view to enforce, on the sale of that substance and its preparations, the requirements of the said Act.

THE EXAMINATIONS.

The following report of the October examinations was submitted to the Council:—

England and Wales.

Major, 10 candidates; 3 passed, 7 failed. Minor, 117 candidates; 71 passed, 46 failed. Modified, 1 candidate, who failed.

Scotland.

Major, 2 candidates; both failed. Minor, 15 candidates; 10 passed, 5 failed.

Pharmaceutical Society of Freland.

MEETING OF COUNCIL, NOVEMBER 2.*

THE chair was taken in the absence of the President by Sir George Owens. The President, Professor Tichhorne, after some time arrived. There were also present Dr. Aquilla Smith, Vice-President, Dr. Collins, Dr. Montgomery, Messrs. Allen, Bennett, Brunker, Draper, Grindley, Hayes, Payne, and Simpson.

Mr. Fennell, Registrar, read the minutes of the last meetings, and the special meeting, which were confirmed.

Mr. PAYNE said he only received notice of the special meeting to elect a member of the Council in the room of Mr. Stanley Oldham on the morning hefore it was held. Was it not possible to give members a longer notice of the meetings?

The PRESIDENT explained that he had not heard of Mr. Oldham's death as soon as it occurred; the election of a substitute must take place within ten days after intimation of the death of a member; he could not call the meeting till after the funeral; and circumstances left him little choice of a day.

Sir GEORGE OWENS moved

That the test thanks of the Council are due, and are hereby tendered, to Mr. Allen, for the careful and efficient manner in which he gratuitously reported the proceedings of the Society during the last twelve months.

Mr. Draper seconded the resolution, which was passed unanimously.

Mr. ALLEN returned thanks.

Mr. Fennell read a letter from Mrs. Oldham thanking the Society for the vote of condolence which had been transmitted to her on the occasion of the death of her husband.

Mr. Fennell stated that he received a letter from Mr. Willam James Smyth, of Belfast, stating that he was desirous of getting a certificate for compounding, and asking would one from a medical man he accepted. He (Mr. Fennell) sent him a copy of the regulations, and at the same time a letter stating that the certificate should be either from a Licentiate Apothecary of Ireland or from a Pharmaceutical Chemist of Great Britain or Ireland. He had since received a letter from Mr. Smyth, stating that "the doctor was not an L. A. H.," and now asking if a certificate given by W. C.

Dobbyn, pharmaceutical chemist, would he accepted. The reason for doubting the respectability of the certificate was that Mr. W. C. Dobbyn was in partnership with his father, who was not a pharmaceutical chemist, but the former did all the compounding.

Mr. PAYNE reported that he had made inquiries, and he confirmed Mr. Smyth's statement as far as it went. The compounding was done by Mr. W. C. Dobbyn, who received all the profits derived from it. It was done in the partner-ship es'ablishment.

Dr. AQUILLA SMITH said it was not clearly stated what the certificate was for.

Mr. PAYNE: It is a certificate to entitle him to come up for examination.

Dr. COLLINS: How long has Mr. Dobbyn, jun., been a licentiate of our hody?

Mr. PAYNE: Since 1876.

Dr. COLLINS: Let him be informed that if he presents a a certificate of two years' apprenticeship from the younger Mr. Dobhyn it will be accepted. We could not accept one from the partnership.

Dr. MONTGOMERY: I think we should ask the gentleman Is he going to serve his time, or what is it that he wauts? He does not say whether he is commencing his term or is at the end of it. He should he asked is he going to he hound; for if that he the case he must be bound solely to a pharmaceutical chemist.

Mr. ALLEN: If he has been two years practically engaged with young Mr. Dohbyn at compounding, that is all we want.

Mr. BRUNKER: The whole turns on whether Mr. Dohlyn, junior, as one member of the firm, can give a certificate. The question involved is a very ticklish one, which must come sooner or later before the Council, namely, whether it is legal for a qualified person and an unqualified person to keep open shop for the compounding and dispensing of medicines. This appears to have been a house of that kind. My opinion is that the Council ought to he very cautious before they give an opinion, which would practically endorse as legal this firm, which may or may not be legal.

Dr. AQUILLA SMITH: The language of the letter is obscure as to whether the certificate to which it refers is one of past or prospective services. I move that a letter he addressed to Mr. Smyth, asking further information on the matters in question.

Mr. Montgomery seconded the motion, which was agreed

A report from the Law Committee was adopted. Mr. Brunker moved

That a Committee be appointed to attend at the examinations for the licence of this Society, two members of which shall always be in attendance during the vivd-voce examination.

After a good deal of consideration he had resolved to make this proposal in the interests of the Society, and with a view to main taining its status. In England there was an official who reported to the Government on the qualifications of the gentlemen who got the licence of the English society, the standards of examination, and the number of persons passed or rejected. They had nothing of that sort in Ireland, and he would he very glad if the Privy Council undertook the duty. At present the members of the Council were quite unaware of what the standard of education maintained by the Examiners was, beyond what information was afforded to them by the written papers. He confessed that, from looking at the papers that had been set during the past year, he thought the standard of education required was extremely low, and not such as the Council should require from their licentiates, whilst some of the papers were of too difficult a character. The viva-vocc examinations on the same subjects might be everything that could be desired, but they did not know what they were; it was only right that the Examiners should he supported in the performance of their duties by the presence of one or two members of the Council.

Mr. HENRY BENNETT seconded the resolution.

Dr. AQUILLA SMITH supported the proposition. He did not helieve that what was proposed would he looked on as an unfair supervision; on the contrary, he thought that all parties would he rather pleased at it. He was sure that the well-educated candidates would. Another thing was, that from forty years' experience, he knew that examiners were very often apt to get into grooves.

^{*} The Council of the Pharmaceutical Society of Ireland now employ a reporter, and his report, after examination and revision by the President, is sent to this journal, and, we believe, to one other.—ED. C. & D.

Mr. S. H. Grindley said the regulations contained a provision that the President or Vice-President of the Society, or, in their absence, one member of the Council, could preside at the examinations. There was also a provisiou in the Act of Parliament that the Privy Council could appoint a person to attend the examinations and report upon them.

Dr. AQUILLA SMITH: The right given by the regulations has been frequently exercised by members of the Council going in and listening to the examinations; but there is a bye-law that no member of the Council is to interfere in them.

Mr. Allen: The regulation is not compulsory.

The President was very much inclined to support Mr. Brunker's motion, but would suggest alterations in two or three points. They had all taken a great deal of pride in the high tone that the Examiners had taken both past and present. Therefore he should be very sorry to see anything done calculated to make the Examiners work inharmoniously with the Council. It was true they had a bye-law under which the President, the Vice-President, or a member of the Council was to be present at the examinations. had never been regularly earried out, although it had been acted on on one or two occasions; and he knew that it had not been very well received by the Examiners. That was one reason, he thought, why some motion like Mr. Brunker's should be passed. He would suggest that the resolution should say that, "with a view to raising the standard of examination a committee be appointed."

Mr. BRUNKER: That would be begging the question. We

do not know what the standard is.

The President said it might also be better to say that "one or two members" of the Committee should be in attendance, and to leave out the word "always." Otherwise, if only one or two happened to attend, some attempt might afterwards be made to invalidate the examination. Also to insert "to report to the Council." As regarded the power of the Privy Council, that was quite another matter. The Privy Council could pay a scientific person to attend the examinations; but the Society had nothing to do with that. It was competent to any individual member of the Society, or to one of the public, to petition the Privy Council to act on their power; but he did not think such a petition should come from the Council.

Dr. AQUILLA SMITH: The power was put into the Act because the latter was drawn on the lines of the one for

Dr. MONTGOMERY said it would not be pleasant for one person to act as a censor: there should be two, at least.

Mr. BRUNKER: That is my idea. As the examinations are at present held, it would be invidious for any single member of the Council voluntarily to make a complaint.

Dr. MONTGOMERY said the effect of passing the resolution would be that the members of the Committee would be looked on by the Examiners, not as spies, but rather as assessors, who could be consulted by them. Did Mr. Brunker intend that the members of the Committee should be present while the Examiners were making up the marks?

Mr. BRUNKER: Certainly not. I have no idea that the Committee should interfere in any way with the Examiners.

They should only be lookers on.

Mr. Draper said he was sure it would be found pleasant by the Examiners to have some one from the Society to speak to during difficult parts of an examination; but, on the other hand, it would be objectionable for members of the Committee to be present at the making up of the marks. In some cases it might act against the candidate, for they all knew that a candidate frequently showed a type of intelligence which, though not corresponding with his marks, might yet entitle him to pass. He would have been glad to have had two members of the Council present when he was an Examiner.

Mr. PAYNE quite agreed with the resolution. His recollection was that in the older times the Examiners had no disinclination to members of the Council being present at the examinations; but in later times he had not had any opportunities of being present at the examinations.

After adopting two of the suggestions of the President,

the resolution was passed in the following form:

That a Committee be appointed to attend at the examinations for the licence of this Society, two members of which shall be in attendance during the vira-voce examinations, and who shall report to the Council as occasion may require, the Committee to consist of the President and Vice-President, and Messrs, Payne, Bennett, Allen, Brunker, Dr. Collins, and Dr. Montgomery.

On the motion of Mr. HAYES, seconded by Mr. DRAPER, the four Examiners of last year were re-elected.

The following new members were elected:—Messrs. William McCarthy, Athy; Richard Cox Webb, Wexford; Richard Suuner, Cork; and George Robert Young, Belfast.

Chemists' Assistants' Associations.

LONDON.

THE first meeting of the fifth session was held at the rooms. 1 22A George Street, Hanover Square, on October 12, 1881. The President, Mr. C. E. Stuart, delivered an inaugural address. He said :-

The members of our association in electing me to serve on the present council, had, I suppose, the conviction that I should be useful to the association. I shall do my best to strengthen that conviction, but I have not got over the idea that the council in electing me president estimated my possible services too highly. To the many old friends and members present I need say little about our affairs, but there may be some who before they join us would like to learn something of the working of the association, its objects, and the benefits it confers. "It is not good for man to be alone." Well, this association is one means of counteracting loneliness. In every meeting of man with man there must be some good developed, even though concomitant evil may hide that good. I know, however, of no alloy of evil mixed up with the benefits derived from our meetings, for though some of us may individually be terrible Radicals, as a body we have no communistic designs against property, we are not banded together in any way to injure our employers, who have in so many instances given us substantial support, and we have resolutely turned a deaf ear to Mr. Parnell's cry of "No Rent." Our landlords will tell you we are model tenants. We meet primarily for the good ends of enlarging our minds and rubbing off rough angles by friendly contact, and as our rule says, "for the discussion of subjects tending to the welfare of all interested in pharmacy." To these ends is suited our programme of meetings. The evenings set apart for the reading of papers serve to set us thinking, and though our thoughts may flow in channels somewhat similar to those of the daytime, yet the manner of their flow is different: the rapidity of the high pressure of business is gone, and the placidity and depth which is found here follow. Glancing back over our past work, many papers will occur to you over which considerable time and thought must have been spent, and which brought out correspondingly useful and suggestive But we cannot always be thinking, and accordingly we set apart evenings when the time may be profitably spent in a chat with one's friends, or a game of chess, or a consultation of the library, and as many of us arc of a musical turn of mind there is generally a piano available. Our annual dinner has always been well attended and thoroughly enjoyed, and with an occasional soirée, the complaint of too much science can hardly be levelled at us. As to our last session, the past council have drawn up a pretty full account of it, but I should fail in my duty did I not allude to one or two events of the past few months. In the first place, by the early and lamented death of Mr. James. a late member of our council, the association has lost one of its firmest friends and hardest workers. Then one or two members have left us to embark in business: let us wish them success and hope they will not forget us. After referring in detail to the programme of the current session, the President said he perhaps might be allowed, following precedent, to say a few words on subjects more or less concerning "the welfare of all interested in pharmacy." One cannot open a number of any of our trade journals, he proceeded, with-out finding some complaint of the state of pharmacy, the overcrowded condition of its ranks and the difficulty of making a living at it, and almost equal in number to the complaints are suggestions of remedy. Legislation usually towards monopoly is proposed, or a compulsory curriculum, or throwing over patents and sundries and confining ourselves to pharmacy proper, or extending that braneh of the business and lowering prices. These suggestions are all good in

their way, but they are scarcely of universal application, and they have mostly the disadvantage of looking at the question solely from our own point of view. That of course is most natural, but the burning questions of pharmacy must be studied in the light of both the public and the pharmacist. To my mind the key to our difficulties lies in the fact that the ranks of pharmacy are overcrowded. It is not for the public or the national good that 20,000 men should be engaged in doing work which is only enough for 10,000. Again, it is not for the public benefit that poisons should be sold indiscriminately, even when properly labelled; neither is it so that they should be sold unnamed as patent medicines. And again, it is not for the public benefit that drugs of all kinds should be pushed down its throat (at an enormous profit) whether wanted or not, in order that one section of the community may live. All these complaints that I have spoken of are evidence of a struggle for existence, and the disadvantages, the actual injuries I have just spoken of, are the outcome of this struggle. Our great countryman, Darwin, has demonstrated this struggle to exist throughout the animal kingdom, and how through all the apparent cruel distinction of life,—all "Nature red in tooth and elaw" there runs the great principle of advance towards perfection. Political economists have applied the same principles to the commercial relations of mankind—a continual struggle and the survival of the fittest. Man is by them looked upon as though he should be a mere selfish automaton, and they complain that by his perverseness he will now and then break the laws they have drawn up for him. In so far as this is the view of the political economist, I think it is an erroneous one. Man is swayed by his heart and his soul as well as by his head, and I cannot for that very reason think that every man against his neighbour is meant to be our normal state. Unlike animals and plants, man can easily adapt himself within wide limits to altered circumstances, and hence all men have a much better chance of survival. Such struggles as war will find few advocates, the distinctive agencies of pestilenee and famine are deplored and combated, and yet the strife of citizen against citizen, of tradesman against tradesman and against customer is allowed to proceed uneliecked. The most that can now be said of war is that it is a necessary evil, while on all sides disease and want are combated to the utmost of our power. The inconsistency of those who hold these scourges not to be evil has a remarkable illustration in Charles Kingsley, who could write that they are beneficial as checks on population, when he was earnest in endeavouring to prevent the internal war of chartist riots, and when the spirit of his works breathes an eternal war against dirt and disease. There is room enough in the world for all and for hundreds of succeeding generations, increased crowding being compensated by advance of scientific food production. No doubt some places are overcrowded, chiefly owing to that overprized virtue patriotism, but this overcrowding is entirely our own fault. Thus I approach the second part of my subject. I have given reasons for my belief that there is no need for numerical struggle between man and But in our occupation of pharmacy at least this struggle exists, and our efforts must be directed towards modifying it and lessening its intensity, and one of the first ways in which this can be done is that which is mentioned both by Mr. Procter in his paper and by Dr. Symes in his address, viz., by adapting ourselves to the times and to our various positions. As assistants the most we can usually do is to take notice of various methods of conducting business, and try them, first by the natural standard of right and wrong, and then by that of "Will it pay?" and according as the answers may be we must decide to remain assistants or to enter into business in accordance with the spirit of the times, or else to seek some other occupation. In this last case the educated pharmacist would have an immense advantage in adaptability over his ignorant and crammed fellow. Again, the spirit of the times is co operation, which is a good principle, but the letter of the carrying of it out is a bad principle; it is a selfish co-operation for the benefit of a class—either the consumer, as in "stores," or the producer or middleman, as in iron and cotton "rings." I believe in the dictum of Ruskin in his political economy essays which he calls "Unto this Last," that the principle of competition is Death, but the principle of co-operation is Life. What should happen is a hearty co-operation of pharmacists among themselves and with the public to the ends of lessening expenses and fixing

just prices, which ends could be attained (among other ways) by the fusion of several small pharmacies into one. I do not pretend here to discuss details, -I am only jumping after principles. A third way of lessening the intensity of the struggle is perhaps slow but must be effective, and that is by gaining the confidence of the public and of medical men by a uniform course of right doing. The number of lies told in pharmacies is small, but the number of acted lies-usually unconsciously acted, but lies nevertheless-is astonishing. With increased confidence would naturally follow increased custom. I have now set out a few thoughts on pharmacy which have been in my mind for some time. I may have spoken freely, but I have at least spoken from conviction. By adhercace to the above principles many must either leave pharmacy or perish at it. But to those who remain an equalisation of profits would ensue and an elevation of moral character; and to the public, what is of more consequence, economy, convenience, and security in an increased ratio.

A hearty vote of thanks was passed to the President for his address, on the motion of Mr. Naylor, seconded by Mr.

Killick.

EDINBURGH.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

THE first meeting of the session was held on October 13, in the rooms of the North British Branch; Mr. Wm. Aitken, president, in the chair. The meeting was the largest ever held by the association. The President apologised for departing from the customary rule of delivering an introductory address, hoping to better interest the members by reading an essay on "Electricity," which was illustrated by a large collection of apparatus and a number of beautiful and successful experiments. The thanks of the meeting were passed to the President for his essay; to Mr. Fairley, who assisted with the demonstrations; and to Messrs, John Mackay & Co., for lending the electrical apparatus. The President then announced the apprentices' prize, and the conditions attached thereto, the subject for the prize essay being "Any Indigenous Plant of the British Pharmacopæia." also intimated that the system of queries would be continued, as formerly, during the session.

PRESTON PHARMACEUTICAL STUDENTS' SOCIETY,

THE third half-yearly general meeting was held on October 13, Mr. T. H. Greenhall, President, in the chair. The Secretary read the report, which showed a balance of 13l. 16s. 4\frac{1}{2}d_{1}, which it was resolved should be handed over to the Treasurer of the Preston Chemists' Association, with which this Society has lately amalgamated. The President congratulated the Society upon its success at the last May examinations in connection with the Science and Art Department; especially with regard to botany, in which subject he did not think any class in the Kingdom had been more successful. The most important event of the past half-year was their consolidation with the Chemists' Association, which he hoped would be of mutual benefit to both parties. He also congratulated the members upon the excellent laboratory which had resulted from this connection. Mr. Greenhall was again elected President but declined the office, and Mr. S. J. Elliott was then elected, with Mr. A. S. Denham, Vice-President, and Messrs. Norris, Parker, and Fellow the Committee.

THE SHEFFIELD PHARMACEUTICAL STUDENTS' ASSOCIATION.

THE above Association was formed a few weeks ago by the assistants and apprentices of Sheffield, having for its object Pharmaceutical education. The officers elected are: President, Mr. R. W. Houfe; Vice-President, Mr. J. S. Mould; Hon. Sec. and Treasurer, Mr. S. P. Lowe; Committee, Messrs. Harrison, Watts, Moby, and Quibell. The opening meeting was held on November 1, in the Sheffield Pharmaceutical Society's Rooms, when the President, after returning thanks for the honour conferred upon him, gave a paper on the "Theories of Chemistry," which was appreciated by a numerous audience.

Probincial Reports.

GLASGOW.

CHEMISTS AND DRUGGISTS' ASSOCIATION.

THE opening meeting of the session was held at Anderson's College on Wednesday, November 2, Mr. Robert McAdam in the chair. The following office-bearers were elected for this session:—President, Mr. Robert McAdam; vice-president, Mr. Robert Brodie; secretary, Mr. W. Paris (Mr. John C. Hunter retiring); librarian, Mr. J. A. Clarke; treasurer, Mr. Maltman. Members of Council—Messrs. D. Frazer, Kinninmont, John Currie, John McMillan, R. C. Rait, W. Wallace, William Simpson, J. C. Steel, John Fenwick, William White, William Weir, and Mr. Dickic. Auditors—Mr. Archibald Paterson and Mr. John Walker.

After a few preliminary remarks the President called upon Mr. John Walker to read his paper on "Patent Medicines,"

which appears on another page of this number.

Mr. Kinninmont lengthily criticised the paper. He did not think chemists needed or wanted protection, but possibly the public might want it. If so, what return was to be given the druggist? He thought we had had quite enough legislation, and did not approve of the way in which the Pharmacy Act of 1868 was forced upon us, though he approved of the educational elements of that Act.

Mr. Brodie strongly denounced the system of affixing the names of eminent men to articles introduced after their decease, and with which they had (and could have) no connection; for instance, applying Liebig's name to so many

preparations.

Messrs. Hunter, Gilmour, and Simpson also made remarks, all agreeing that some such step as that proposed by Mr. Walker was necessary in order to put a stop to, or lessen, the number of patents.

A hearty vote of thanks was given to Mr. Walker for his paper, and subsequently more new members were elected.

MANCHESTER.

THE CHEMISTS AND DRUGGISTS' ASSOCIATION.

THE members of the Council of this Association were entertained at the Reform Club, Manchester, on Monday evening, October 31, by the President, Mr. Councillor W. Scott Brown. After the removal of the cloth, the President expressed the great pleasure he felt in again meeting his friends and colleagues. He regretted that the state of his health did not permit him to take a more active part in the affairs of the Association in which he had always taken the warmest interest. In looking back on the last twelve or fourteen years he saw how much the unity and friendly feeling which existed amongst the chemists of Manchester had been promoted by the work of that Society. He was glad to know that there was a fair attendance at the classes now being held, and which constituted the Manchester School of Pharmacy; and he hoped the Council would be able to make satisfactory arrangements for meetings to be held during the winter months. The president concluded by calling on Mr. Benger (hon. sec.) to give some particulars of the present condition of the Association, and on Mr. Siebold to report on the classes, after which a general discussion took place as to the best mode of securing representative meetings of the trade in Manchester and surrounding towns. Subsequently a committee was appointed to consider the subject, and to report to the Council.

NOTTINGHAM.

THE NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.

THE opening meeting of the session was held under the presidency of Mr. R. Fitzburgh, F.C.S., on October 26. There was but a moderate attendance. The following prizes gained during the past session in Mr. Bown's Pharmacy and Materia and Medica class were presented by the President:

—Pharmacy and Materia Medica—1, Mr. F. J. Swayne; 2, Mr. G. W. Briggs. Materia Medica—Mr. W. H. Walker, Mr. W. Gill, and Mr. W. H. Potter. Practical Dispensers—Mr. E. H. Judge obtained the 1st and Mr. Potter the 2nd. The prizes were the gifts of the Council, Mr. Haywood, Mr.

H. Cowley, Mr. J. H. Atherton, Mr. Fitzhugh, and Mr. W. H. Parker. The President addressed the students, and was supported in his remarks by the Vice-President (Mr. Fletcher), Mr. W. H. Parker, and Mr. Bolton.

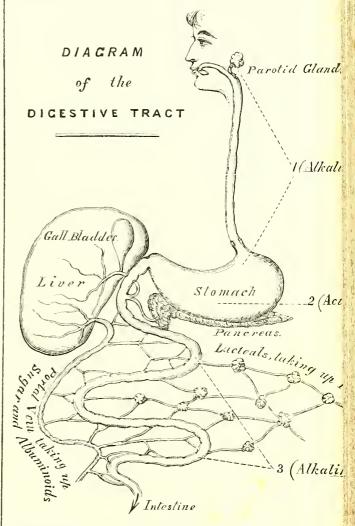
PENZANCE.

ACCIDENT.—On September 30 Mr. H. R. Cornish, chemist, Market Place, Penzance, met with a serious accident. His horse fell forward on its head, throwing Mr. Cornish, and rolling on him. He was badly crushed about the hips, but no bones were broken, and there is every prospect of his recovery.

ARTIFICIAL DIGESTIVE AGENTS: THE USE OF MALT EXTRACTS.

BY J. MILNER FOTHERGILL, M.D.

A FTER the study of the diagram and the text of the preceding article on "Digestion," the reader will have some well-defined impressions as to the correct use of the different artificial digestive agents now in vogue. It is clear that the use of each must be directed by its proper place in the digestive act. When it is desired to aid the salivary



digestion of starch it will not be a successful plan to give the vegetable diastase after a meal, when the contents of the stomach are highly acid. In an acid medium diastase dies; and so is wasted by being given when the stomach is pronouncedly acid. It must be given so as to be operative before the stomach is acid.

When the chemist found that the diastase of the seed of the cerealia exercised the same effect upon starch as does the diastase of the human saliva, the step forward to the adoption of vegetable diastase to add to the potency of human saliva, when defective in amount or energy, was an easy one. But there were matters of detail still to be attended to in order to attain complete success.

The first preparations of malt extract were dark products, often possessing a burnt taste. They were evaporated by boiling, and consequently all the diastase was killed. Such preparations of malt extract are valueless as digestive agents; though they may possess other qualities, which may be termed the lesser qualities of a malt extract. Diastase is destroyed, according to Dr. William Roberts, F.R.S., by a temperature of from 140° to 150° Fabr. Consequently preparations made by evaporating at the boiling point contain no active diastase. To retain the diastase unimpaired in activity the evaporation must be conducted at a lower temperature-indeed, a temperature not above 140° Fahr. How far each preparation of malt extract is so prepared, and contains diastase in a functionally active form, is a matter on which the chemist must form his own opinion; guided, more or less, by the labels affixed by the manufacturer. Some proclaim the fact that their preparations contain no active diastase. With these latter we are not engaged at present.

Malt extract contains, then, the phosphates of the grain, some sugar and dextrine, and a certain portion of diastase in an active form—that is, it is a nutritive substance as well as a digestive agent: it possesses the power of converting starch into sugar in the body. But reference to the diagram tel's us that in order to utilise this digestive property it must be given before the stomach becomes highly acid. If given after this time it is rendered inert as a

digestive agent.

To proceed to its practical use, then, it must be given (1) either immediately before farinaceous food be taken; (2) in the farinaceous food; or (3) immediately afterwards, before the contents of the stomach become acid.

Now, I need not detain us further.

2, however, is highly important. But if a form of malt extract be added to food, it is essential that it be not unpalatable, nor yet unpleasing to the eye. A good malt extract is neither. It is a sweet, molasses-like substance; consequently it can readily be added to farinaceous food before being eaten. Milk gruel, milk puddings, alike could have some malt extract added to them just on being served on the table. This, indeed, is the best method of using malt extract; but there is one caution to be observed, and that is this: the farinaceous matter must not be too hot when the malt extract is added, else the diastase is destroyed as regards its digestive activity. How is the nurse to be made to understand this? She only needs to know the practice to be adopted; utterly disregardful of the reasons, it is to be feared! Dr. William Roberts tells us that food cannot be sipped comfortably if above a temperature of 150° Fahr. Consequently the directions should be as follows:- Taste the food first to see if it can be taken without sealding the mouth; if too hot, let it cool till it can be sipped, and then stir into it the malt extract. Probably a little insistence would ensure this point being attended to by the nurse.

3. Where the food does not admit of such admixture before being taken, to give the malt extract immediately after the farinaceous food has been taken, so that the diastase may be operative before the stomach becomes

decided'y acid.

(In connection with this it is well to follow the old rule of "pudding before meat.")

To give the malt extract after a meal is to waste it—as a digestive agent.

Such, then, are the points to be attended to in the use of

extracts of malt as artificial digestive agents.

Malt extract may also be used to add to milk with delicate children, invalids, and dyspeptics; and forms a useful

as well as palatable addition as a food.

The lesser qualities of malt extract, i.e., the other than the possession of digestive diastase, are its nutritive qualities. All malt extracts contain the soluble phosphates of the grain, and some of its starch already converted into sugar or dextrine (a soluble substance chemically lying mid-

way between starch and sugar) by the action of the diastase in the malting process. Consequently, it forms a good addition to the dictary of delicate individuals, children or adults. Probably for such use it is preferable to any form of baked flour; which, after all, is only starch, without the other constituents of the grain, or, at best, in only a very small proportion. With a little milk, or milk and some effervescing water, it forms a very excellent nutritious drink in fevers, in exhaustion from effort, in convalescence, and in certain surgical emergencies.

THE PATENT MEDICINE TRADE.

[The following paper was read at the opening meeting of the Glasgow Chemists and Druggists' Association by Mr. J. Walker (The Glasgow Apothe caries' Company).]

EXCEPTING a few alterations here and there this paper on "Patent Medicines" was hurriedly written—I will not say prepared—for last session, but those of you who were present at the opening meeting then will, no doubt, remember that I gave a paper on a different subject. I do not mention this by way of apology for now giving you this one, but may state that I have been requested to read it—not that it is by any means perfect or that it exhausts the subject, but that we may discuss the question, and, personally, I shall be glad to hear the opinion of those present, not simply on this paper, but on the patent medicine question in general.

The principal reason why I took up this subject was not because of the "cutting prices" by stores, grocers, &c., but because of the continually-growing sale of these so-called "patents." On this point the President of the British Pharmaceutical Conference, in his York address, when reviewing, "pharmaceutically," the last century, or, I should

rather say, the present century, stated:-

"That patents did not occupy so large a place in stockbooks as they have done in the second half of the enlightened nineteenth century. The names of a few of the proprietary medicines of our day flourished then, but from the stockbooks that have come under my observation it would seem that four-fifths of the quack medicines patronised by the

last generation have now fallen into disuse."

Notwithstanding the falling-off of the four-fifths referred to-which, I suppose, did not result from their worthlessness, but for want of advertising, or want of cash to advertise-"Money makes the mare go, whether she bas legs or no "-I say, notwithstanding this falling off, we find, by new introductions, a very large increase; but why this increasing sale? Has the demand caused the supply or the supply the demand? I think we are agreed that the latter is the greater cause, and it is chiefly to this that I would direct your attention, for by the exercise of wise diplomacy we may yet win, possibly not the sale, but the day, as against this growing trade. You all know that it forms a very large percentage of your sales. This is perhaps more readily noticed by wholesale houses, as the quantities and value come before them more in the aggregate than they do with the retailer. I fancy most of these houses would not be sorry were this branch of trade falling off, for I do not believe, taking all things into account, it pays them-at all events, were their profits all round the same as on these goods we would soon hear of bankruptcies here and there.

The revenue from the sale of patent medicine stamps for the year ending March 31, 1881, amounted to 139,762½, 188, 10½¼, representing 17,198,442 stamps of different value, and 18,754 licences to sell patents taken out, for which the sum of 4,688½. 108, was paid. Now, in round numbers, the duty is one-eighth of the value of the article sold; so, multiplying that sum by 8, gives 1,118,103½. 118, worth of stamped medicines sold in England and Scotland (for remember the stamp is not necessary in the sister isle—Ireland), and if you add to that the unstamped proprietary articles, we shall not be far off the mark if we state 2,000,000½ as the total sale for one year, which sum is equal to the drawings for one year of 3,846 shops turning over 10½ every week, and all in proprietary medicines—or 1,923 with a weekly drawing of 20½ for 52 weeks; so if you think

to yourselves how many towns are required to give us either of these number of shops you have some idea of the extent

of the trade, at which we will now look.

From the frequency with which this subject turns up in our trade journals, few, I think, will deny that it is now a "burning" question, and no wonder, for when looked at we are compelled to admit that in its present state it is anything but a satisfactory one, and I would further say that at any time it is not a desirable trade, and that the name is altogether a misnomer, for there is no patenting at all in the question.

Take any other patented article, and we find it has been patented because of something new in the design or process of production or manufacture, and that there were heavy charges to pay before the article was fully protected and patented; but not so with our so-called patent medicines: they need go before no commissioners, and no patent extending over a certain number of years is, or requires to be, taken out, though in some cases we find that the name of the article is registered so as to secure the use of that name solely by the proprietor. All that the law requires is that the proprietor purchases by the dozen or gross the patent medicine stamps, as we purchase our postage stamps, and have them affixed to his article. Some, in order to lend a little more mystery, have their names engraved over the Government stamps ("without which none are genuine"). To all this we have no objection as a source of revenue to the Government, but, somehow or other, the public believe that there is in this very simple process something similar to the process of patenting other articles, and that, therefore, the medicines are new and valuable discoveries, which, as we know, is all a delusion, for these medicines, though proprietary, are in no sense "patent."

There is no satisfaction to the intelligent chemist and druggist in selling these articles, even when retailed at their full price, and to hand them over the counter and take in the money requires no training or knowledge of drugs or chemicals—any newsboy could sell them quite as well as the chemist. But why is it that the proprietors prefer to sell through our trade instead of through grocers, drapers, newsagents, &c? Simply because it is a help to the introduction and sale. Many of those who put up such articles are in no way connected with our trade, yet they get us to sell, and by our doing so the public have more faith in the nostrum

than if left to the grocer to introduce.

I believe that the sale is very much larger and the trade more established just because of the support of our trade in the past, the public wrongly, yet not without some cause, believing that because "sold by all respectable chemists"

that is a certain guarantee of genuineness.

Has not the trade, by getting as many bills as possible and sending out to customers, encouraged and helped to extend the patent medicine business; and have not many been anxious to have their names appear in the newspapers and periodicals as agents? For those to do so who in no way complain of the trade there is nothing out of place, but it does seem odd that those who do complain should yet do their best to extend the sale.

With Mr. Barnard S. Proctor I believe that "Proprietary medicines, though not essentially evil, are so mixed up with evils that they cannot be regarded otherwise than a tempta. tion and a snare." That being so, I hold that even at full prices the trade should not be encouraged, and if we do sell let us do so only because the public ask for and will have the goods. Give up helping or extending the sale, refuse their bills and their offer to make an advertising medium of us and of our shop windows, doors, and counters. I sometimes wonder what is the druggists' (aye, and even some medical men's) object in asking for and sending out bills, pamphlets, and almanacs of a certain c'ass. Is it that they really endorse the contents and wish to extend the sale of the goods thus advertised, or is it merely to advertise their own names? If the latter, it is a mean way of doing so; if the former, why have a word to say against the trade? I, however, believe that many do not consider this matter, and never ask themselves why they get and send out bills. They do so because it is the custom of the trade; but I would have them be reasonable in this matter, and understand that it is not logical to condemn what they countenance and encourage.

The druggist is more in his province dispensing and selling drugs and chemicals. The more "patents" sold the

fewer drugs are bought. You do not get the same percentage off the sale of patents as off your more legitimate trading, and when the public purchase "patents" they do not either, as a rule, get so much value for their money.

Now, seeing that the trade is not a satisfactory one, it is our duty to see how it can be improved or put down. At present we will not aim at the latter, for it is difficult, and not desirable that our prevailing customs and institutions be too speedily changed; yet we may have reform, even

though it be gradual.

Dr. Symes, in his address to students at Bloomsbury Square, October 5, 1881, says:—"All who have long been engaged in the business have seen some of the things known as 'sundries' pass away from the domain of pharmacy, and others are slowly disappearing. I believe our wisdom lies in not wasting time in regretting their loss, or in seeking how they may be recovered; but, being conscious that within us lies a large amount of latent energy, we should exert ourselves to effect its development, and to replace that which is lost by something more closely allied to our profession." Dr. Symes does not say by what this loss is to be replaced, and at present that does not matter much, for that is not the point before us. I quote him simply to show that this question calls for our serious consideration.

The position I would have the trade take up is this: that in all cases where the full prices are obtainable let them sell, but keep these goods out of sight, take in no bills, and in no way allow one's name to appear in connection with them. Thus in a certain sense the trade would then sell, as it were, under protest, and such action would be in harmony with our dislike to that branch of trade. But in districts where stores, &c., have taken up the sale, which we cannot prevent them doing, and have lowered retail prices to, or under, wholesale prices, we must either let them have the trade or meet their prices. If we let them have the sale I do not think our trade would in the long run suffer much, though, meanwhile, we might have somewhat reduced sales. One thing, we must not blame the public for going to such places. Do you, if you know it, give more to one house than you would to another for the same proprietary article—for instance, say, Howard's quinine?

To expect to get 1s. $1\frac{1}{2}d$. when your neighbour sells at $10\frac{1}{2}d$. (or less) is most unreasonable, and the person who knowingly in such cases gives you 1s. $1\frac{1}{2}d$. loses 3d. Some say, "Reduce to 1s."—but that will not do; others say, "Try 11d." Still 1 would pass your door and buy from

your neighbour at $10\frac{1}{2}d$.

I do not, however, say, meet these prices, for you would do as well, so far as profit is concerned, to sell one at full price as eighteen at the reduced rate. In trading a fair profit is allowable, but it is not trading at all to sell at a loss or even at eost.

On the other hand, if you want to keep the sale, especially in the large centres, there is nothing for it but to go in for low profits and ready money on the arcicles. This point we have not time to-night to fully discuss, but may ask, would the 5 per cent., or at most 10 per cent., profit at reduced prices, not be less than the working expenses of

retail druggists?

Could the trade in such cases unitedly say, "We will give up the sale of these patents altogether, and in every way set our face against them," the public would gradually lose faith in them. Why should we sell medicines of which we have little or no knowledge? Very often they are taken when they should not be taken, for these advertisements prey upon the credulity of the public. I believe that if the sale lost the support of our trade it would lose one of its

strongest advertising mediums.

Besides this suggested way of trying to I'mit the sale, I would have legislation on the subject. B. S. Froctor says: "If it is desirable that patent medicines should exist, it is probably most desirable in public interests that they should be dispensed [sold, I suppose he means] by pharmacists," "but the advantage is not so great as to require legislative interference in that direction—the public will not give the pharmacist an advantage unless he gives them an equal advantage in return." Mr. Proctor is right; that is not the direction in which I would seek reform; still I would go in for legislation, and have an Act passed, somewhat after the Frence law, have a committee of, say, three persons, to be appointed by the Privy Council, and to consist of, say, a

medical man, an analytical chemist, and a pharmaeist, or two medical men and a chemist, before whom all patent medicines would have to go before they could be sold. That is, supposing any person wished to start a patent medicine, he would first have to send to this commission his recipe (not for publication), a sample of the article, with labels and directions, also a list of the ailments, &c., for which he intended recommending it, and that until this commission should pass the article, i.e., declare that it was what it pretended to be, it would be illegal to advertise or sell it. Those already established might be allowed to continue without this restriction, but many of them would ere long dic a natural death, for those that had passed the commission would have a certificate attached to show that they had been approved, which would by and by cause the public to lose faith in those not so registered. Of course any of the present proprietary articles could be sent to the Commissioners of Patent Medicines in the usual way, and those that deserved to pass would be approved. A fixed charge or fee would be made by these commissioners for their examina-We do not say that we disapprove of all the patents now selling, but of many, especially those largely advertised, we do complain.

The effect of such an Act would be twofold, first, it would ensure that the article was something more than a quack medicine; that, in fact, it had something in it; and, secondly, and this I think the principal recommendation of such a measure, it would to a great extent lessen the number of patent medicines; for under the present open and unsatisfactory system scarcely a day passes but we hear of some new adventure or new speculator in this line from

America or elsewhere.

It is true that even with such a law, any person could start a patent medicine, but then people would be more careful as to what they put up, and what they would say about, and charge for, their products. They would know that this commission would be bound not to pass, unless in every way satisfied that the article was what it represented to be. This committee might also have the exclusive sale of the duty stamps.

Many who at present start a patent medicine would not then do so; thus we should have fewer, and what we had

would be more reliable and trustworthy.

Then, if at any time an article were found not in accordance with the original recipe let the proprietor be fined, but allow him at any time to apply for permission to alter his formula. If this or some such measure were brought before Parliament, I hold we may reasonably expect that it would receive an all but unanimous support, and be placed on the Statute Book of Great Britain before many sessions were over.

It only requires agitation, and we are the parties to agitate for such a change: we cannot expect our members of Parliament to know all our wants or desirable changes, so must educate and agitate; but legislation belongs to those who are chosen to attend to such matters. This is just the subject for any of our M.D. members of Parliament to take up (and I hold in my hand a letter from Dr. Cameron, M.P., which shows that he agrees with us as to the unsatisfactory state of the law regarding patent medicines, and that he is open for our suggestions, with a view to some remedy), for they could and, I believe, would readily show to Parliament that the first reason for this change would be the good of the nation, for, as at present advertised, many of the socalled "patent medicines" are taken when something of an entirely different nature is needed, and thus the health of the people suffers. Some of the medicines may be, and, I dare say, are, good in their way, but the evil lies in that they are taken for all ailments, and at all times, and in all quantities by persons who do not know what is the matter with themselves, and do not know how or when to use the advertised article.

This I hold to be a just way of legislating, and a measure we can conceive of Parliament passing, but the restriction of the sale of "patent medicines" to chemists and druggists is what, I am afraid, Parliament will never sanction—the

days of protection are gone.

Some advocate a Bill to compel all patent medicines containing articles mentioned in "Poisons Schedules" to be labelled showing what they contain, and also to be labelled "Poison," and then sold only by qualified parties; but this is stretching the Pharmacy Act too much.

On this protection question the Pharmaceutical Journal, in a leading article, October 15, 1881, says:—"The need for such a step has not been overlooked by the Council of the Pharmaceutical Society, and quite recently, in drafting a Bill for the amendment of the Pharmacy Acts, the labelling of patent medicines being or containing poison was provided for by a clause which required that, on the preparation for sale (whether by wholesale or by retail) of any patent medicine or any article bearing a patent medicine stamp, being or containing a poison within the meaning of the Pharmacy Act, the person so preparing the same shall cause the box, bottle, or vessel containing it to be labelled with his name and address and the word 'Poison.' In the same spirit it is provided by another clause of this Bill that it shall be unlawful to sell by retail poisons within the meaning of the Act, whether as patent medicines or otherwise, unless the seller be a duly registered and qualified person.'

I approve of the first clause or suggestion, and would have no objection to add it to the other measure I have suggested; but when you ask that, when so labelled, the druggist only should be allowed to hand them over the counter and receive the money, it seems to me that the latter clause or provision is the major one and the former the minor, and to be a selfish request. What more safety would the public have by the druggists having exclusive and free sale than your next-door neighbour having a free sale? The reason those who advocate this give is that, as the law compels education up to a certain standard in order to qualify for certain responsible duties, therefore the trade should be protected. Against this I do not say one word, so far as dispensing, sale of poisons from bulk, &c., is concerned, but It think the parties ask too much of a monopoly and go in for too much "protection" for these days. They are out and out of the "Lowther" class of Conservatives, and forget that the public as well as Parliament are too strongly imbued with the principles of Cobden and Bright to admit of any measure destructive of free trade. Yet for all that I do not despair; for whilst we need not, and should not, look

for protection, we may look for legislation.

Parliament does not legislate for a sect, or class, or trade, but for the people. Was the object in passing the Pharmacy Act simply as a benefit to our trade? I think not; Parliament looked at that measure more in the light of such an Act being for the benefit of the people, and here let it be observed that the first duty of all Governments and Parliaments is to administer the laws and legislate for the good of the people and country at large—that is, for the many, ignoring the few. The restriction of the sale of poisons under the Pharmacy Act was not enacted to protect the drug trade or for its special benefit. It was passed because Parliament was convinced that it would be for the benefit of the people were poisons not so readily obtainable, and sold only by those who had some knowledge of them, and even then under certain restrictions; and Parliament, I hold, could not have handed over this trade to any others than chemists and druggists, for in what other trade would there have been found qualified parties? But I very much mistake if Parliament would so hand over the sale of patent medicines or even those that contain poisons within the meaning of the Act. I fail to see how the public would be in any way protected by the druggist selling instead of the grocer, unless a restriction on the sale be also enacted. Supposing a restriction could be put on the sale, then the druggist would be the proper party to sell, but any restriction that we can conceive of Parliament sanctioning must be one for the safety of the public.

Now supposing such an Act were in force, take any restricted medicine, for instance, Brown's "Chlorodyne"—is all the restriction to be simply a register of the sale? That I hold would be no restriction, and would not in any way benefit the public, though it might and would benefit the drug trade. If not this restriction, then I ask what would those who advocate such an act propose? Would they make the druggist the judge as to who should and who should not buy Chlorodyne—in fact, make the druggist decide as to whether Chlorodyne were the proper remedy for the disease or ailment the would-be purchaser complained of? No, the medical profession would at once oppose this, and it would be foolish to think of asking Parliament to pass such an Act.

The Pharmaceutical Journal, in the article already referred to, on a poisoning case by Hunter's solution of

chloral, further says: "The case reported serves to show how much restrictions are required in regard to the sale of poisons in the form of patent medicines, and how thoroughly, under existing conditions, the safeguards provided by the Pharmacy Act are negatived by the sale of such articles by grocers, co-operative stores, or any other unqualified persons."

Now I should like to know, were the Act advocated in force, what safeguard the public would have? Would, or would not, the druggists be allowed to sell such an article? If so, what sized bottle? I suppose any one of the 1s. $1\frac{1}{2}d$., 2s. 9d., 4s. 6d., or 11s. sizes, and if so, would the purchaser not have in one of these more than enough for an over and therefore fatal dose? It appears that in this poisoning case referred to, the chemist at Diss would not have sold Miss Ashfield the chloral; but why? Certainly not that the law prevented him, but seemingly because of some former advice from her medical attendant. At almost any other drug shop more than a fatal purchase could have heen made, and, for that matter, do not many druggists sell daily opium enough, even under present Poisons Act, to he fatal to purchasers?

The editorial further says: "These precautions and the wise intentions of the Act were, however, completely frustrated by the facility with which the obnoxious article was procured from the 'stores,' and opportunity afforded for secret indulgence in the practice which led, as in so many other cases, to a fatal result." By this we are, I suppose, to understand that such an article should not be procurable anywhere but at a drug shop, and then there would be no further "secret indulgence" or "fatal results," but I confess I fail to see that either of these happy results would be attained.

It is not on this line we must seek a change, but on the more reasonable one of the commission suggested. It would check the "quack medicines," and just as punishment, besides heing the dessert of transgression, acts as a deterrent, so would our suggested plan act. The fact that all proprietary articles would have to go before this commission would keep many from launching a patent medicine. This, I say, is a reasonable thing to advocate, and it could be shown to Parliament that such an Act would be for the benefit and health of the people, and, therefore, that it is the duty of Parliament to look into the matter. At present a proprietor can declare that his nostrum is good for "all the ills to which human flesh is heir," and very often their advertising pamphlets, almanacs, &c., which our trade helps to scatter abroad, are so put as to make the common folks imagine they have, if not all the "ills," at least the one they at the moment may be reading, for the power of advertisements is wonderful; indeed, advertising is becoming a science, and as regards patent medicines it is now recognised as a primary and unavoidable outlay in the enterprise, and often all but the only capital in the undertaking. The Yankee version of Franklin's lines-

> He that by the plough would thrive Himself must either hold or drive,

adapted to the times, is-

He that by his trade would rise Must either bust or advertise.

Wherein lies the success as regards sale (and I should also say profit) of certain recent importations from America? I am sure it is not in any special virtue or healing power, hut in repeated and taking advertisements. This is what steam is to commerce, viz., their grand propelling power, and I regret to say that of late many of the medical profession have also been influenced by this bewitching power, through the medium of medical journals.

By such a change as now proposed, this, to a great extent, would be checked, and as a consequence the sale considerably

lessened.

Whilst such an Act, though not a restrictive one, would be for the benefit and safety of the public, and therefore a right thing to promote in Parliament, it would also (though this need not he told at St. Stephen's) act heneficially in the interest of our trade, for as you lessen the sale of these secret nostrums you help to increase the legitimate trade—or should I call it profession?—of the chemist and druggist.

It is not in this country only that reform is felt to be

requisite. In the cditorial already referred to the *Pharmaceutical Journal* further says, and, in a more appreciative way, I close with this quotation: "The plausible allurements by which the nostrum traffic is promoted are everywhere attracting the attention of medical men and pharmacists. In America this trade has attained to such dimensions that, as stated in the annual address by the President of the Pennsylvanian Pharmaceutical Association, two-thirds of the total quantity of medicine annually consumed in the United States is sold in the form of secret nostrum. Phamacists, however, should seek to huild up a more legitimate business—that of dispensing to the public such drugs and medicines as are prescribed by the regular medical profession.

It is not at all desirable that this [secret nostrum] trade should be promoted by the exhibition of flaming cards or the distribution of puffing circulars."

PHARMACEUTICAL COMPETITION.

THE following address was delivered by Mr. G. F. Schacht at the first general meeting of the session of the Bristol Pharmaceutical Association, of which he is president, on October 28. Having referred to a recent modification of the rules of the Association allowing the introduction of pharmaceutical politics and pharmaceutical ethics into their discussions, Mr. Schacht said:

Of that freedom I propose to avail myself, for I should like to say a few words upon some of the social phenomena of the present time and their bearing upon the well-heing

of our art and the well-doing of our husiness.

The subject as thus stated is large (becoming, indeed, larger the more it is thought ahout), and I must at once admit that my own powers of observation and reasoning are not strong enough to carry me very far in the matter. I will endeavour, however, to set some of you thinking, and in the meantime will try to avoid the mistake of pretending to solve a large question from partial considerations—or of substituting dogmatic assertion for reasonable conclusion, a habit that I think lies at the root of much that we have to deplore.

And perhaps at this point I may venture to introduce a parenthetical note. It needs a large mind and a large heart to enable a man of even large general ability to grasp the full bearing of the many influences that surround any social question. The ordinary man is prone to content himself with those only that lie immediately within his own experience, and then, very naturally, to exaggerate their

importance.

Where the larger qualities I have referred to are found associated in some favoured individual, there, prohably, is seen a true philosopher, and the world does wisely to listen to him.

Some, to their own and others' great benefit, do listen some, to their own and others' great harm, decline to heed any hut their own more narrow promptings; they pronounce the philosopher to be a mere theorist, and declare his "general principles" to be "impractical." Nevertheless, it comes to he seen in the long run that time and experience range themselves on the side of "general principles," and show that he is the most "practically" wise who controls his practice into accordance with them.

None of us here, perhaps, can pretend to the large gifts of the philosopher; but we can all listen to philosophic teaching, if we will; and my reason for repeating these rather trite observations is, that such teaching appears to he overlooked hy some who have lately written on our subject and hy those who, in their alarm at what they regard as new phenomena, proclaim a panic and rush to what I cannot help regarding as the resources of despair.

That you may not for a moment imagine I am speaking at random, I will at once give you illustrations of my meaning. A writer of no mean position in the pharmaceutical world has recently announced that he finds the town he lives in now contains fewer pharmaceutical establishments than it did some years ago; and he recommends that one half of those that are left should "eat up" the other half as the sole method of saving itself.

For my second illustration I remind you of certain firms

well known to you that have recently proclaimed a scheme of remuneration in their retail departments hitherto supposed to apply only to large transactions, or where quality is a matter of secondary consideration.

It appears to me that in these and in similar eases, special and, therefore, exceptional facts have been unduly exalted, and that conclusions have been arrived at that are opposed

to the teachings of sound principles.

And what are the "general principles" that should guide us now? Let me answer the question by asking another. What are the difficulties that especially affliet us now? Are they the result of new developments of human nature or of man's institutions? Are they so altogether fresh to our experiences that we must invent for the oecasion a special eode of ethics, and write a new page in our political economy?

I incline rather to the opinion (expressed some time ago) that there is nothing new under the sun, that the social problems that exercise us now are probably but modifications of those that interested our fathers before us; that they probably arise out of the same war of impulses towards wrong and right that agitated them, and will be most probably determined by the same principles as those

upon which they relied.

I cannot, for the life of me, discover any new wiekedness iu modern society. It shows, alas, plenty of wiekedness, but all of the "old Adam" type, self and self-indulgence as its basis, and all the history I know fails to point to a time when such was not the case. In the past, as in the present, a certain order of man endeavoured to take advantage of his neighbour, to get, for instance, for 6d. (or perhaps for nothing) what was worth 1s., and succeeded, perhaps, at one time as well as at the other; and yet these fathers of ours managed to hammer out, more or less elearly, that the whole duty and happiness of man consisted in "doing justly and walking humbly," or, practically, in "doing to others as they would others should do to them." Philosophers of the highest order and of the widest ken had thus summarised their teaching; its wisdom had been admitted throughout the ages, and our fathers handed it on, as a precious gift to Why should we affect to doubt its value now?

"Ah, yes!" I have heard it said, "these theories are lovely in the abstract. But in business-how is it possible they can

rule in business?"

And pray why not? If not in business, where are they to have any weight at all? Business probably eovers ninetenths of my life. Shall its one-tenth come within the range of the "lovely theories" and its nine-tenths be reekoned to lie open for all wickedness to spoil and disfigure as it pleases?

All sentiment and theory, is it? Come, let us reason together as hard, practical men. With whom do you and I

do our business?

Let us say with four sets of people, maiuly-

1st .- With the people we employ. 2nd.—With the people we buy from.

3rd.—With the people we sell to.

4th.-With the people of our own calling.

Let us see how far our principle is practically applicable

and where it becomes mere sentiment.

Let me take as an illustration a very average ease—my own ease. I have been over 40 years in pharmaey, during all that time I have eaten and drunk of the best; I have laughed and joked as much as the heartiest of you, I have married and brought up my children to take their parts in the future creditably, and I have put by something for the old age that is coming. Whom have I to thank for all this? After acknowledging most reverently and humbly full gratitude to the Great Giver of all, to whom am I next indebted? To every one of those we have just enumerated.

I have used the labour and intelligence of my assistants,

and have turned them into money.

I have used the enterprise, the skill, and the capital of my wholesale friends, and turned them into money.

I have used the confidence and trust reposed in me by my

customers, and turned them into money.

I have used the prestige, the knowledge, and the sympathy of my fellow-pharmaeists, and turned them to the making of my professional self.

And, per contra, during these processes-

I have endeavoured that every assistant that entered my

house should leave it a better pharmacist than when he came in.

I have hoped, and I believe that my wholesale friends have got a profit upon every parcel of goods they have sent

I have hoped and striven that every customer of mine has received ample money's worth for his money.

And I hope that, to some extent at least, I have paid back

to my order a portion of what I owe it.

And hence the result.

Practically, I say this "theory" has paid me well. Now look to the obverse.

Are you likely to get better service by treating your assistants as you would not like to be treated yourself if

Are you likely to get better supplied with goods by trying to grasp the wholesale dealer's profit as well as your own?

Are you likely to secure more customers by doing anything that shall raise a doubt of your honour? If not, how can it be held that our glorious old rule, "Do unto others as you would others should do to you," does not apply to business?

In these, the coarser matters of business, it absolutely

For others will serve you as you have served them, genc-

rally good for good, most certainly evil for evil.

It is possible someone may wish to urge that my argument appears the strongest where there is at present the least occasion for dispute, and weakest where it is most required. That no great ery of ill-treatment has been raised by assistants and that wholesale dealers as a rule can take good care of themselves; but that, on the other hand, the public, our customers, are far too "praetieal" to be influenced towards us by any than by the purest self-interest, and that as the rage for cheap goods has gone forth, he only who has the courage to leave the old paths of pharmacy and to cater for this new demand can live.

Moreover, it may be thought that I have but very incompletely applied my theory to the relations which connect the

individual with the other members of his trade.

I am not sorry to consider these two parts of the subject together, for to my mind they eannot properly be considered

apart.

As I comprehend pharmacy and pharmacists—pharmacy is the property of no single individual any more than a highway is the property of any single traveller. The traveller has a right to use the highway, but no right to spoil it for others' use; the pharmaeist is under a similar obligation. He did not make pharmaey, any more than the traveller made the road, and they are both equally bound to preserve the one and the other for the general good. Undoubtedly in either of my supposed cases we may discover an offender; but then he is regarded as an offender and has to take the consequences. In such eases there is frequently seen certain of the public who appear to approve, who find it convenient to adopt just so much of the offender's story, and for just such space of time, as suits their convenience. To that exact extent the offender succeeds in getting the whip hand of his neighbour, and perhaps enjoys a triumph. But his true recompense is expressed in the general scorn with which he is thrust into the pillery (moral or other), and the word "renegade" hurled against him; for, that a man should be true to his order seems to be one of society's first and most imperious demands. The English public never seems to take kindly to the renegade in whatever department of social life he appears; they suspect him and refuse to trust him out of their sight, and the glare of his first pretensions having passed away, they look again for such as they can trust.

Through all the days of my experience in this city there have been cheap shops of various kinds, including cheap drug shops, their proprietors aiming to thrive by underselling their neighbours; many of these have disappeared from the seene-some by the process of a few shillings in the pound—yet still some exist. We may, I suppose, eontinue to await the result of this constantly-repeated experiment. Many of us suffer much in the process; we have yet to learn who gets the benefit. The writer to whom I have before alluded frankly admits that if all chemists reduced their profits to nothing to-morrow, there would be no more drugs eonsumed; the eateh is only to him who is the first to begin the system of under-selling, and that that will cease

the moment his neighbours follow his example. In the mcantime the entire business is being shorn of its legitimate profit, and its very life endangered. I am afraid I cannot logically contend that the individual who thus sets the ball of destruction rolling does not thereby make some money. I suppose he does. At any rate, it must be admitted he will do an increase of business; his neighbours will do so much the less. His gain will be attended with very little profit; their loss, unfortunately, will be attended by proportionate and palpable diminution of the means of living. And all around, therefore, there must result great temptation to bad and low pharmacy: profits being infinitesimal, temptation to trickery will be in some cases irresistible. Cheap drugs, cheap labour, and cheap morals do not constitute the condition under which pharmacy can flourish, and so, alas, it will languish, or take flight into more healthy regions, where once again the public for its own self-defence must follow it.

And thus "Wisdom will be justified of her children."

Let us for a final few moments try and escape with it. Let us persuade ourselves that the world contains lots of people as sensible as ourselves, such as know and feel "the labourer is worthy of his hire," and are willing, in order that they may get good labour, to pay a decent price for it, and let us be true to ourselves and each other in a resolve to give nothing but fair work, and accept nothing but fair wage.

If in any particular direction work appears to fail, let us not lose ourselves forthwith in a panic of unwisdom and throw up all the rest, but let us rather cast about, as sensible beings, for fresh fields of labour and other channels of enterprise. Is the pharmacist so small a creature that he must disappear if his trade in "patents" departs to the "store"? Has he no other resources than are involved in handing 4½d. and a box of "Cockles'" in exchange for 1s. 6d.? It is possible such creatures may be known to some, but they are not to me. I rather believe that we are made of the stuff of our fathers, who did not know when they were beaten, but again and again "came up'smiling."

If I did not thus think, I would not be here to night, and if you did not more or less sympathise with me you would not be here either. We are met here to-night because we wish each other well, and are willing to co-operate for the general good of our common calling. It is by such united action that we hope to enlarge its area and increase its usefulness. I am sure good directions of work lie still about us only half utilised. I have a book at home containing records of scores of examinations of the morbid secretions of patients conducted at the request of their physicians. I have another book containing details of many analyses of doubtful substances sent to me by all kinds of persons.

I would rather not talk of myself, but I can most properly remind you of our late friend and companion in pharmacy, Mr. Stoddart, who so developed this branch of his work that he found it better to leave the rest to other

hands.

You are strong enough, I think, to need ro further promptings from me. Work well and work earnestly, and work will come to you, and most probably (if you are not in too great haste to become rich) you will be able to get an ample reward for all you do.

For my own part, believe me, I do not wish to see five years hence one single pharmaceutical establishment closed that exists now; much rather do I hope that the demand for pharmacists, in the best interests of the public, may so increase that two may then flourish where one now exists.

FOOTBALL.—Pharmaceutical v. Royal Savoy.—This match, played on Primrose Hill on November 12, resulted, after a pleasant game, in a victory for the "'Ceuticals" by two tries and one touch to *nil*. The tries were obtained by Howell and Haward; Tupholme also played well for the Pharmaceutical, and Hull distinguished himself for their opponents. Sides.—Pharmaceutical: Cripps (back), Merrett and Price (three-quarter-backs), Dudley, Haward and Tupand Thee (three-quarter-backs), Dudrey, Haward and Tup-holme (half-backs), Thompson (Captain), Betty, Bovill, Braithwaite, Coney, Callaway, Fowler, Howell, and Wallis (forwards). Savoy: Hull and Tatnam (backs), Beach and Payne (three-quarter-backs), Maskell and Stuart (half-backs), Ackfield, W. Burry, T. Burry, Francis, Stalman, Lynam, Roberts, Jones, and Cluer (forwards).

CHEMISTS' AERATED AND MINERAL WATERS ASSOCIATION (LIMITED).

ANNUAL MEETING.

N October 24 this meeting was held at the Cannon Street hotel, at 3 P.M., Mr. Horacc Davenport in the chair. The directors considered the profit made on the returns was a matter of congratulation, but urged the immediate attention of the shareholders to the indebtedness of the Association. They had themselves attended to many matters usually undertaken by a salaried manager, and had thus saved the company much expense. They did not grudge the trouble, but felt it gave them a right to ask the other members to work with them for the common weal, and not merely to act as if they dealing with a firm of which they formed no part. Members might push the waters, get their friends to join the Association, and none take less than a 101. share. They had found it necessary to increase their plant to meet the pressure on them during the hot weather. One fifth of their last year's sales had been made in one month. They had spent a good deal in advertising, and though the immediate result had not answered their expectations, no doubt the value of their goodwill had been vastly increased. They thought the cost of advertising their new specialities ought to be charged to enaital account, but as that appeared to be inadmissible they had put the cost to preliminary expenses, so that it would be spread over some

The following is an abstract of the accounts. For the sake of comparison we print with it some of the figures of the

last balance-sheet: By Capital issued to Sept. 30, 1881 To Sept. 30, 1880

, y	Capital issued to kept.	,,,	TOOL			-		TOKCDO		
	Shares of 11. each Shares of 101, each			£ 5,000 3,420	0			£ 5,006 2,300	0	d. 0 0
				8,420	0	0		7,306	0	0
	Less shares forfeited unpaid	or	part	408	10	0		313	0	C
	By mortgage capital			8 011 1,100		0		6,993 1,200		0
				9 111	10	0		8,193	0	0
	1880	ts	(Cap	ital A	leco	nun	<i>t</i>).			
						188	81	18	80	
						£	s. d.	£	s.	d.
	Leasehold property and				0.7	00	16 6	2,475	10	^
	improvements at cost						8 11	1,667		
	Plant at cost Bottles, syphons, cases,				1,2	i k	0 11	1,007	0	10
	&c., in hand				2.0	04	18 11	2,085	5	0
	Office furniture at cost						7 6	16]		
	Preliminary expenses				2.9	05	6 5	1,326	2	2
	Harrogate branch		2,696	3 1						
	Net profit for year, less									
	loss of previous year	•	30 1	1 6						
				_	2,7	26	14 7	1,830	8	2
					12,7	77	12 10	9,401	5	8

This leaves a balance of 3,666l. 2s. 10d. of payments over receipts on capital account, for which amount the Association still stands indebted. The London Revenue account shows that the sales during the year have been 4,677l. 15s. 8d., against 3,381l. 18s. 5d. last year; the gross profit on sales and stock in hand is 1,718l. 0s. 10d., against 955l. 15s. 2d.; the net profit on the London branch is 7291. 5s. 3d. this year, against 225l. 0s. 1d. last year.

Last year the Harrogate branch showed a net loss of 50l. 4s. 4d. This year the net profit is 80l. 15s. 10d., leaving a balance of 30l, 11s. 6d. to the credit of the Association.

The net profit on the year's business is therefore 759l, 16s, 9d., besides 90l, wiped off from previous losses. This is equivalent to $9\frac{1}{3}$ per cent. on the share capital. But as the capital account stands indebted to various creditors to the amount of 3,666l. 2s. 10d., the directors say "it would be eminently unfair to our creditors were we to declare a dividend," so they proposed to deal with the profits as follows: --

•						£	s.	d.
Wear and tear of plant						200	0	0
Preliminary expenses, being 10) per	cent.	of th	ae	total			
amount						310		
Balance carried forward					• •	249	16	9
						759	16	9

Twenty-one shareholders were present. The Secretary

read the notice convening the meeting.

The CHAIRMAN said the small number present made him begin to fear that the shareholders were apathetic about the affairs of the Association. These were in a critical condition. A considerable profit had been made on the actual business of the year; business was increasing every month, and their only trouble was want of capital. Expenses had been kept down by the personal attention of the directors, who had dispensed with a manager. The increase of plant had been absolutely necessary. Waters must be supplied directly they were ordered without waiting the arrival of empties. They consequently had on hand a floating stock of about 3,000l. worth of syphons and bottles. Advertising had been long and earnestly discussed before it was commenced. Sbareholders were consulted, and seemed to think that they would be able to sell the Kissengen water if it were advertised. The money spent on advertising had not been thrown away; it had built up a business in the Association's specialties; but the immediate return was not fully satisfactory, partly because the members had not backed it up by pushing the articles themselves. An admirable illustration of what can be done by pushing had been furnished by Brighton. One member there took a dozen Rubine and had failed to sell it. Another bought 200 dozen, and was now asking for special terms if he took 500 dozen. The debts must be faced, whether the method of expenditure were approved or not. Some shareholders misunderstood the position of the Association. Each one on joining cost the Association about fifteen pounds, yet quite a large proportion had taken only a single 11. share, and the more the Association extended in that direction the weaker it became. Shareholders must be prepared to find capital for the conduct of the business. At present by far the larger proportion of the capital has been found by three or four who decline to advance more. Chemists must help themselves. The Association was started to assist them to recover the mineral-water trade by supplying them with a first-class article at a price low enough to enable them to compete with other traders. Some shareholders overlook this, and try to keep up old prices instead of competing with the grocer on his own ground. Others imagine that it is a trading concern, and say they will be glad to join the Association if they are guaranteed the sole agency. This is quite a mistaken idea. Four chemists in a town all recommending the same article will each do better than a single man. A recommendation backed up by four opponents commands much more confidence than anything one man can say. In conclusion,

The CHAIRMAN proposed that the report and balance

sheet should be adopted.

Mr. Faulkner, of Notting Hill, seconded the resolution. Mr. Bathe considered it a most strange and erratic proceeding to put the cost of advertising to the preliminary expenses. He also complained that plant and stock had been put down at cost. If it were necessary to realise great depreciation would be found. He would like to know the items of the sums lumped as "materials," "sundries," "office expenses and salaries." The balance-sheet showed not a particle of profit, but rather a loss of more than 2,000l.—a very serious matter. The advertising, which should have been put to current expenses, was made to back up capital. The Chairman remarked that no reasonable person ex-

The CHAIRMAN remarked that no reasonable person expected to get immediate returns from his advertising. He spends money to build up a business which brings him in an income for many years, which could not be obtained so easily in any other way. (Hear, hear.) Referring to Mr. Bathe's other criticisms the Chairman aid the cost of materials necessarily depended on the extent of the business. Mr. Bathe seemed to think only of the expenditure and not of the receipts. The 490l. for office expenses, salaries, &c., contained as items, postage 63l., salaries 283l., and he thought these sums very little considering the immense number of small items of which their business was made up—books, papers, &c. Office expenses were actually lower than last year, when less business was done. The directors were far the largest shareholders, and were more interested in keeping down the expenses than any others.

Mr. Bathe said he had opposed the Harrogate affair from the very first. He believed they would have had by this time a large and flourishing business round London, if they

had been content to stay there. He was one of the first shareholders, and held ten shares, and he would have done as much as any one to push the business of the Association if they had proceeded in a sober, discreet manner.

The CHAIRMAN admitted an error of judgment as to the value of the Harrogate business. They had paid too much for it, but still it had this year yielded a profit, and had been of undoubted service to the northern members; and it must be remembered that the Association was founded for the benefit of the chemists and druggists of Great Britain, not for those of London cnly.

Mr. Nicholls said he had come with the express purpose of moving an amendment to the balance-sheet. drawn up in a very improper manner. The Association was but three years old, and yet the directors had been advertising to the extent of 1,300%. That ought to have been put down as working expenses. The manœuvres of two years ago had been repeated with a like result to the shareholders. directors had been spending 600l. a year more than they had saved, and no other face could be put upon the matter. It crippled the shareholders in their attempts to secure fresh members. They could not ask their friends to put their money in a failing concern. He could not endorse the statement that the sale of Rubine was increasing. He had ordered 100,000 bills to push it in his own neighbourhood, and just as he had done so the directors changed the method of putting it up: took it out of syphons, and put it up in 6d. bottles. The Chairman was one of the best-hearted men in the trade, and would do all he could for the Association; but he was only one, and should not allow bimself to be led into these extravagant expenses. advertising had wrecked the dividend. It was a clever trick to put it where it was in the balance sheet, and the consequence was that many people could not understand it. He proposed as an amendment,

That the balance-sheet be referred back to the directors, in order that the item for advertising may be put in its proper place.

Mr. Fitch, of Hackney, said that his opinions halted midway between those of the directors and those of the last speaker. Of the 5,000 1l. shares some holders may have two, three, or four, but very few have as many as ten. people who suppose that the Association can be worked for a pound a piece are worse than fools. If each member does not advance at least 15l. towards the capital he is practically asking the larger shareholders to lend him bottles and plant. He knew a shareholder in a large way of business in the West end who holds one, and another in the East end who holds two, 1l. shares; and these men had been very noisy in urging the directors to do more for the sbareholders. If he had done all the directors' work he would have felt badly treated if he had double their fees. They could not expect to recover all their preliminary and advertising expenses in one year. If they did that it would be such a splendid concern that everyone would wish to be in it. Still he thought the advertisements of Rubine were a mistake. The Association should have been more firmly established before it was attempted. In his own locality he found that Rubine would not sell. Customers would not pay 6d. for a drink. He thought the advertising expenditure should be removed from capital account and written off.

The CHAIRMAN remarked that he had been the leading spirit in suggesting advertising, and was as much responsible as anyone. They had now stopped it entirely. The directors were placed in a very unenviable position. The advertising had undoubtedly done good. Business had increased 50 per cent, and a large number of new shareholders had been obtained by it in Leeds, Bradford, and that district. Messrs. Clark, Son & Platt, the well-known advertising agents, had acted in a most liberal manner. They had been much struck with the specialties, had taken shares in the Association, and had given credit for the advertisements. They

had not yet been paid.

Mr. Wilson, the Harrogate director, thought that people expected a great deal from the Harrogate branch, and were not willing to give it a fair cbance. It had been established only 14 months, and already showed a profit on the working, and had now just upon a hundred customers, where last year there were only 25. They now sold more water in a week than they did in a month half a year ago. Last year they owed about 500l., this year only 80l. The Kissen-

gen water had not entirely answered expectations, but accounted for a tenth of the whole returns. As a countryman he had been astonished to see the quantity of patent medicines in the windows of the London shops. These could not bring in much profit, and chemists would do better to make a show of the specialties of the Association. North-country chemists could not possibly have dealt with London for their waters, and as a northern branch was required no better place could have been chosen than Harrogate. The water there was exceptionally pure, containing only four grains of solid matter to the gallon.

Other sharcholders made a few suggestions.

Mr. Hampson said that though it was right and proper that the balance-sheet should be criticised, he was glad the amendment to it had not been seconded, and hoped that it would be withdrawn. They must have confidence in their directors, and the fact that the Chairman had a larger stake in the concern than anyonc else was a guarantee to the shareholders that their interests coincided with his. His object in supporting the directors was to try and induce other shareholders to advance more capital. He was prepared to do this himself, but he hoped that when they had the money they would be careful not to let it go too easily.

Mr. Robinson (Malden & Co.) said that since he became a member he had made 10*l*, more profit on this branch of his trade, and he would give them a cheque for a 10*l*, share, in addition to his present 1*l*, share, before leaving the room.

Mr. BATHE seconded Mr. Nicholls' amendment to the report.

After some conversation Mr. Nicholls withdrew his amendment, on the verbal guarantee of the directors to expend no sum exceeding 400l. or 500l. without calling a special meeting of the shareholders.

The CHAIRMAN said they would give this guarantee very willingly. He supposed it would not apply to needed additions to plant. ("No, no.") Still, he would point out that the number of shareholders gained by advertising would more than pay the interest on the 1,300% expended.

The report and balance-sheet were then carried, only Mr.

Bathe objecting.

The next business was the election of the retiring directors. The Chairman himself had been laid up during four months by an accident. Mr. Wilson had been elected by the directors, and his election needed confirmation.

The re-election of the directors was proposed by Mr. Pond and seconded by Mr. Hampson, and carried unanimously.

Mr. BATHE then proposed a vote of thanks to the Chairman for his very courteous and efficient conduct of the business of the meeting.

PHARMACOPŒIA REVISION.

American Pharmaccutical Association Committee on the Revision of the United States Pharmacopæia. Report on the Revision of the United States Pharmacopæia preliminary to the Convention of 1880. Prepared and compiled by Charles Rice, Chairman of the Committee. New York. 1880. The report not for sale.

(SECOND NOTICE.)

In reviewing the formulæ and processes of the Committee's report on the Revision of the United States Pharmacopæia we have no intention of noting every little change or introduction, but it may be remarked that, as in the general principles, so also in these, there are several outstanding features not difficult to lay hold of for purposes of reference or criticism. For example, with one or two exceptions, and these all in the direction of popularising the Pharmacopæia, the formulæ have about them a commendable simplicity, and the processes have all a thoroughly practical bearing. Again, the deletions proposed are all of a judicious character, even although it may be the opinion of many that the pruning knife might with advantage have been more freely applied; while, on the other hand, the additions generally are such as to commend themselves to the approval of everyone anxious for uniformity and completeness. Among the additions, however, are some of questionable propriety, while others appear to us even decidedly

objectionable. In the former category we would place such preparations as Aromatic Vinegar, Cologne Water, &c., with corelated substances, such as Adeps Jasmini, Alcohol Deodoratum, Jasminum, &c. Granted that all such substances are used in "considerable quantities in some parts of the country," and granted also that they are more "particularly used in hospitals as a grateful perfume and lotion for the body," we still think the argument may be turned either against the principle of this admission altogether or in favour of a much wider application thereof. Lavender Water, Florida Water, Bay Rum, and probably 20 other similar preparations might on the same grounds claim a place, and we do not see where the line could consistently be drawn which would exclude the one and admit the other. We have tried the formula for Aromatic Vinegar, and admit that it yields a fair toilet preparation, but we do not think that any maker will admit superiority in this proposed official product. The truth is, every maker of such articles assumes his own formula to be unsurpassable, and absolute uniformity in such preparations is neither required nor expected. In short, Cooley and Beasley have a useful sphere in furnishing such formulæ, and there is no use in over-bulking our Pharmacopoeias by making them do duty instead. More objectionable are such formulæ as Liquor Chloroformi Co. (syn. Chlorodyne), Ungt. Paraffini (syn. Vaseline), and probably one or two others which might be mentioned. Regarding the first, the Committee apologise for its introduction thus :- "Whatever may be said about the apparently unscientific character of the above or similar formulæ, there appears to be a necessity of adopting a standard formula, as the preparation is much used even in regular practice. The formula might be much simplified. In its present shape it does not seem to deserve recognition." Exactly! As regards Paraffin Ointment, it is a bad substitute for a good preparation, and we cannot think it will be accepted either by pharmacists or physicians. The substitute offered is a mixture of paraffin oil and yellow wax, in the proportion of seven to three, and everyone must be aware how serious is the divergence here proposed. We cannot see why the Committee should not do as the Commission for the Revision of the German Pharmacopæia have done, and what they themselves have done in Extractum Carnis and other cases-namely, accept the substance, from whatever source procured, and give the characters and tests by which its purity and genuineness may be determined. There is a tendency at the present time, wherever private enterprise has been successful in introducing any new preparation, for shoals of imitators to rush in and trade on the reputation and share the profits. We hope our Pharmacopæias will keep aloof from anything of this kind; but the introduction of such formulæ, at the best but indifferent imitations, is sailing very much in the same direction, and too near the wind for our liking.

Passing from formulæ of this kind, and, for brevity, grouping the substances as much as possible, we note first

the proposed introduction of seven

NEW ACIDS.

Glacial Acetic, Boracic, Chrysophanic, Diluted Hydrobromic, Olcic, Stronger Phosphoric, and Salicylic Acids. The Diluted Hydrobromic Acid is prepared according to Dr. Squibb's process, reviewed in these columns some months ago, and, as there pointed out, no better process probably could be introduced. The only point calling for remark is the wisdom of naming the strength here proposed "diluted," in view of the almost universal use-at least, in this country-of an acid known and ordered by the profession as diluted, of only about one-fourth the strength of the above preparation. The introduction of Oleic Acid seems almost a necessity, considering the various directions in which it is now being employed, and particularly if the Oleates afterwards to be referred to are introduced. As regards Stronger Phosphoric Acid, no one will question the necessity of its introduction, whether the strength ultimately fixed upon be 1 700 or, as others would have it, 1.350. We advocated its introduction more than 12 months since, and pointed out that the diluted acid might conveniently be prepared from it, and even gave processes for so preparing it in the very direction which we are glad to see the Committee following. In the case of Diluted Hydrocyanic Acid we notice a slight

innovation in distilling the acid over diluted alcohol for the purpose of preserving the acid. The Chairman of the Committee gives his testimony to another method of preserving it, in adding 0·1 per cent. pure sulphuric acid. He states that during a number of years he has made many gallens of the acid without the contents of a single bottle

ever spoiling, even on long keeping.

The next important additions are Nitrite of Amyl and Hydrochlorate of Apomcrphia. Regarding the former the "German Pharmacopeia Report" gives the following characteristics: - "A pale-yellow liquid of a disagreeable odour, causing headache and a rush of blood to the throat. It is scarcely soluble in water, but miscible in all proportions with alcohol, ether, and chloroform. It boils between 94° C. and 100° C. (201° to 212° Fahr.). Its specific gravity is 0.878 to 0.882 at 15° C. It burns with a fawn-coloured On shaking 10 c.c. of nitrite of amyl with 2 c.c. of a mixture of water of ammonia (1 part) and water (9 parts), the latter should not redden blue litmus-paper. Gently warmed with solution of nitrate of silver and water of ammonia, it should not turn black." Of the Hydrochlorate of Apomorphia the same report has the following: —"A greyish-white crystalline powder mixed with small colourless, shining crystals, and soluble in water. When exposed to damp air it turns green. The aqueous solution should be colourless and neutral to test-paper; when warmed it rapidly turns green without losing its neutral The salt is insoluble in ether and chloroform. Should it impart colour to either of these liquids it is to be rejected."

No new

MEDICATED WATERS

Are proposed to be added, but a slight modification in the strength of most, and the substitution of precipitated phosphate of calcium for carbonate of magnesia as a medium of triturating and subdividing the essential oils is here characteristic. The alternative process of the British Pharmacopæia of bruising the bark or seed, adding water, and distilling, is also submitted. There can be no doubt that this last process gives a product for delicacy and flavour altogether superior to that by trituration, but we are doubtful if it will in this case take its place, and therefore the substitution of phosphate of calcium for carbonate of magnesia is commendable. Every one is aware that a certain portion of the magnesia is dissolved in making the medicated water, which is thereby rendered alkaline, a property very apt to produce modifications in certain mixtures. Phosphate of calcium, being practically insoluble in water, not only obviates this, but also breaks up the essential oil equally well with the magnesia. This hint may be taken and used in various directions in private practice, as we find it largely taken advantage of in the report before us. All waters from essential oils are made 1 part to 500, with 4 parts precipitated phosphate of calcium, except bitteralmond water, which is made 1 part to 1,000.

Passing over upwards of a dozen preparations, some of them new, as, for example, Goa Ponder, Salicylate of Atropia, Gurgun Balsam, Baptisia, Berberin (some salt of), Byronia, Bromide and Iodide of Calcium, Caffeine, &c., and some common to our own Pharmacopæia, but all of minor importance, we come to one to which the Committee apparently think it necessary to attach a semi-apology for its introduction, namely, Carbasus Antisepticus (Antiseptic Gauze). The success which has attended the antiseptic treatment of wounds, operations, &c., and the importance now justly attached to this mode of treatment, render it, we think, highly improbable that this preparation will have an ephemeral existence, and its introduction, therefore, requires no comment save approval. Were pharmacists alive to their own position, influence, and interests, they would require no promptings or hints from the other profession, but would take the lead in devising new processes and pre-parations, not only in the direction indicated, but in other directions as well. The gauze muslin used is described as being of "loose texture, having about 30 to 36 threads to the linear inch."

Antiseptic Gauze,

Prepared by the following method, is stated to be equally effective and much more pliable than that prepared by the original process of Lister. Take of—

						Parts
Resin, in coarse pe	wder	 		• •		40
Castor oil		 	• •			4
Carbolic acid		 	• •			10
Alcohol (strong)		 				170
Gauze muslin	••	 		A s	uffici	ency

Dissolve the resin, castor oil, and carbolic acid in the alcohol. Then immerse in the mixture folded pieces of gauze muslin, and allow them to macerate for 15 minutes, or until they are thoroughly saturated. Remove the excess of liquid by strong pressure, spread them out horizontally, and, as soon as the alcohol has nearly evaporated, fold them and preserve in air-tight boxes.

The old distinction between Cerate and Ointment is still retained, the example of our own Pharmacopæia notwithstanding, but there are no new introductions, and only a few unimportant changes, in the strengths and processes of old formulæ. Under

CERATUM RESINE (Ungt. Resinæ, B.P.)

Is a note from the "German Pharmacopæia Report," to the effect that this ointment should not be stirred, as it will remain perfectly uniform without this. This is a fact not generally known, but we can bear testimony to the superiority of the ointment if left to cool without stirring. The stirring makes it somewhat granular in appearance, destroying to a great extent its elastic adhesive properties, and leaves it more of the consistence of an ointment than cerate. Our Pharmacopæia Committee do not seem to have been aware of this, as it is directed to be stirred constantly while it cools. After Cerii Nitras (Nitrate of Cerium) and Chloral Butylicum (Croton Chloral) we come to a lengthy report by Professor Prescott on

"PHARMACOPCEIAL ASSAY METHODS FOR CINCHONA BARKS AND TESTS FOR CINCHONAL ALKALOIDS."

The report comprises—(1) A condensed criticism of the whole subject; (2) estimation of total alkaloids; (3) estimation of quiniæ in total alkaloids; (4) test of sulphate of cinchonia; (5) test of sulphate of cinchonidia, now for the first time introduced. We do not mean to enter into this report, because it is only provisional and it only gives processes and tests, or unimportant modifications of those already published. Introducing

CODEIA,

The Committee are again indebted to the "German Pharmacopæia Report" for a very important series of characters and tests belonging to this substance. We think them so important as to give them in full:—"Handsome crystals belonging to the rhombic system, sometimes forming octoheders. Anhydrous Codeia fuses at 150° C., and on cooling congeals to a crystalline mass. In water kept at a full boil Codeia softens and forms clear drops, which partly float on the surface and solidify on slow cooling to large crystals. It is soluble at 15° C. in 80 parts of water, at 100° C. in 17 parts. Dilute alkalies do not render a solution of Codeia saturated at 15° C. turbid. Ether and alcohol dissolve the hydrated alkaloid abundantly; benzine and petroleum ether dissolve it but sparingly. It differs from morphia in not altering a solution of iodic acid, or a mixture of chloride of iron and ferricyanide of potassium. In cold pure concentrated sulphuric acid Codeia dissolves to a colourless solution; on warming this turns green. If the acid contains traces of iron the cold solution assumes a fine blue colour, turning violet or red on warming."

COLLODIUM OLEI TIGLII,

Composed of 1 part each croton oil and flexible collodion, seems a sensible and safe method of using the croton oil for vesicating purposes. The Flexible Collodion, from which the foregoing is prepared, differs little in the relative proportions of the ingredients from that of our own Pharmacopeia; but if we compare the two collodions, on the other hand, we find that recommended by the Committee double the pyroxylin strength of the British. It is stated that this stronger preparation has been chosen after comparing the films resulting from a large number of collodions made with varying percentages of gun-cotton and menstrua. "It is strongly contractile, dries rapidly, and forms a tough skin." Under

DECOCTA AND INFUSA (DECOCTIONS AND INFUSIONS)

We have a very good illustration of the utility, where practicable, of a uniform percentage strength of preparations. In both cases, if the preparation is not a compound, or if it has no special feature, such as strength, &c., to cause a deviation, the following comprehensive rule is recommended, viz.:-" Decoctions, the strength of which is not specified by the physician nor directed by the Pharmacopoia, are to be prepared by the following formula:—Take of the substance in a moderately coarsc powder 1 part, put it into a suitable vessel provided with cover, pour upon it cold water 10 parts, then heat it in a steam-bath for half an hour, allow to cool to about 45° C. (115° F.), strain, and pour enough water through the strainer to obtain 10 parts." Infusions have the same rule and the same strength, with the difference in the instructions as to using boiling water and letting stand for two hours. Both have the following caution added :- "The strength of decoctions (or infusions) of energetic or powerful substances should be especially prescribed by the physician." These general directions, not only guide the pharmacist to a great extent in what at present are difficult, because unknown, cases, but they free the Pharmacopæia of many unnecessary formulæ. For example, eight decoctions have been omitted as coming under the rule, and five infusions. No new decoctions are proposed, but there are three infusions, viz., Infusum Brayeræ (Kousso): 1 to 15, macerate for 15 minutes, and dispense without straining; Infusum Scunæ Comp. (Black Draught); and Infusum Spigeliæ Comp. (Worm Tea), an infusion which might conveniently be omitted.

ELATERINUM,

The proximate principle of elaterium, is proposed to be introduced, owing to the acknowledged deterioration in the quality of the latter. The powerful nature of the substance, however, together with the similarity of the names, has suggested a new departure to the Committee, which, though probably savouring to some of homoeopathy, deserves serious consideration. The proposition is to introduce a new class of preparations, particularly of powerful remedies, which are prescribed in doses so small as to be exactly weighed only with difficulty; those to be composed of 1 part of the active principle with 9 parts of sugar of milk, and to be called Attenuationes, or Triturationes, or Pulvis dilutus. The recommendation has much to commend it, and, in fact, the principle is already recognised in many establishments where morphia, strychnia, and similar substances are regularly dispensed; but its final adoption into our Pharmacopœias, as here proposed, must ultimately depend upon the physician being brought to recognise and cordially agree with the principle involved. This we can say from experience in favour of some such scheme, that not one assistant in ten is so trained, either in the knowledge or use of the balance, as to be trusted to weigh the fraction of a grain at the same time expeditiously and correctly.

Probably no class of preparations have been more disappointing to us than

ELIXIRS.

From the amount of literature we have had from time to time recommending them, and the strong advocacy they have received from many American writers, we were prepared to see the Committee strong on this point, but they have modestly contented themselves with the introduction of four formulæ, the omission of which it is not too much to say would be no great loss to the Pharmacopæia. Of the four one is professedly an imitation of Easton's Syrup, and the only other worthy of notice is Elixir Cinchona, and it might be introduced under a title already recognised in the Pharmacopœia if it were thought necessary to introduce it at all. In this way the necessity for a new series of preparations is avoided. We have no objection to the name "elixir," nor to the introduction of a new class of formulæ in the interests of elegant pharmacy, but there is nothing in those before us to warrant their presence in the Pharmacopæia.

EXTRACTS,

However, the Committee arc particularly strong, but they have not as yet had time to carry their experiments sufficiently far to enable them to do much more than submit the list of titles. In ordinary extracts we notice two additions

deserving notice, viz., Extractum Carnis and Extractum Malti. The former is defined as "an aqueous extract of lcan beef, deprived as much as possible of fat, albumen, and gelatine. Characters: Has a brown colour, and pleasant odour resembling that of roasted meat. It is completely soluble in water, yielding a clear solution. When dried at 110°C. (230°F.) 100 parts should not lose over 22 parts of moisture, and after incineration should not leave more than 18 parts of ash, containing only a small amount of chloride of sodium. Alcohol of 90 per cent. should dissolve not less than 56 per cent. of the extract." The following process is given for the

MALT EXTRACT,

But it is modestly suggested that "the formula is no doubt capable of improvement":—

Take of—

Malt in coarse powder 100 parts
Water q.s.

Upon the malt, contained in a suitable vessel, pour cold water 100 parts, and allow it to macerate for six hours at the ordinary temperature. Then add warm water heated to about 30°C. (86°F.) 400 parts, and digest the whole for one hour, at temperature of 65°C. (149°F.). Raise the temperature to the boiling-point, and strain with strong expression. Finally evaporate the strained liquid rapidly to the consistence of a thick extract by means of a water-bath or in a vacuum apparatus. In a foot-note it is stated that some formulæ direct maceration and digestion at a moderate temperature, avoiding boiling; others direct the boiled liquid after straining to be mixed with white of egg, in the proportion of the white of one egg for every pound of malt, and again to be boiled and strained, and then to be evaporated.

DRY EXTRACTS (EXTRACTA SICCA)

The Committee recommend their introduction, but reserve details, such as kinds, methods of preparation, preserving, &c., until further experiments have been made. It is suggested that sugar of milk will probably be the best dilutent where such is necessary, but whether the fluid extract or the solid extract should form the start-point from which to make the dried preparation remains to be decided. It is in the

FLUID EXTRACTS (EXTRACTA FLUIDA)

That the Committee are strongest, and here, to the 40 and upward extracts already officinal in the United States Pharmacopœia, as many more are recommended to be added; so that it is now difficult to suggest another addition to the long list of between 80 and 90 preparations here proposed. In adjusting the list of fluid extracts the Committee have had a work before them of no ordinary magnitude, and probably no better subject could be fixed upon, were such needed, to show the zeal and skill characteristic of all pharmaceutical investigation in America. Still, in saying this, it cannot also be said that the labours of the committee are to any extent ended; nor can it even be said that the difficulties remaining to be overcome are any less in that they are clearly understood and set forth in the report. The principal diffi-culties might briefly be summarised into these three, viz., menstrua, processes, and substitution (in finished product) of weight for weight for measure for weight. On the first of these alone do the committee formulate, and this they do in a condensed form, without remark or criticism further than that the data are on the authority of Dr. Squibb, than whom no man living probably has experimented more or is better able to give an authoritative opinion on this subject. As regards processes the Committee give four, which have been recommended, without entering into any details or discussion on their respective merits. These are -1. Procter's, adopted by the United States Pharmacopæia, 1860, and which consists of percolation pure and simple, the substance being first moistened with the menstruum, and then packed into a percolator, and afterwards extracted with the menstruum until three-fourths have passed. The percolation is then continued with a large excess of menstruum, and this second percolate is evaporated to the required one-fourth, and added to the first percolate. 2. Campbell's process, adopted by the United States Pharmacopoeia, 1870, and which might be called the combined process of maceration and percolation. The

case, but immediately the liquid begins to drop the orifice is closed, and the percolator set aside in a moderately warm place for four days. Afterwards the process is carried on much as in the previous case. 3. Squibb's process, or the process of repercolation. This consists in the successive application of the same percolating menstruum to fresh portions of the substance to be percolated, so that the menstruum aeting repeatedly on unexhausted portions of the drug becomes concentrated to the greatest possible extent. 4. Diehl's process, or the weight and volume process. This is a process of maceration and percolation, similar in the first stage to Campbell's; but the second percolate is taken and evaporated to a given quantity, and to it is added an estimated volume of alcohol, so as to bring the two percolates into an uniform alcoholic strength, so that on mixing there shall be no precipitation from the addition of a weaker alcoholic extract to a stronger. There is also in this process the attempt to harmonise the weight and measure difficulty, the last and not the least difficulty which, as we have mentioned, the Committee require to face. This difficulty has been brought about by the abandonment of definite weights and measures, in the formulæ, and the problem to be solved may be put in the words of the Committee, "Whether fluid extracts made to represent the crude drug weight for weight would differ so much in strength from those at present in use which represent the drug measure for weight, that their adoption would involve difficulties in prescribing." Dr. Squibb thinks the difficulties not insuperable, but Professor Diehl, foreseeing not only difficulties in prescribing, but probably also a long and, at the best (considering the differences to be found in drugs), an unsatisfactory series of experiments to determine densities, &c., of finished products, boldly accepts the situation, and here proposes weight and volume much in the old lines. In whatever way these and other difficulties may ultimately be settled, the work already accomplished by the Committee is sufficient guarantee that they will not be shirked, but will be settled on a seientific and satisfactory

PHARMACY IN AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

Melbourne, October 4.

THE adulteration of food and drink is attracting considerable attention at the present time in this colony. The matter was first brought under notice at the opening lecture of the Australian Health Society, delivered some weeks ago by Mr. R. W. Emerson McIvor, an analytical chemist, and the inquiries since made by Messrs. Cosmo Newbery and Frederick Dunn, of the Technological Museum, into the system of adulteration as practised in Victoria, affords anything but a cheerful picture. Unfortunately for consumers, the further examination is pressed the greater appears the want of legal authority to repress the introduction and manufacture of adulterated goods. At present the public are at the mercy of any sharp-more properly, dishonest-person who likes to foist spurious compounds on the market as genuine goods. In dealing with adulteration it would he manifestly unfair and unreasonable to select one or two articles for legal supervision: what is required, and what the public will demand, is that, in protection both of their health and the revenue, the Government shall devise some means to put down with a strong hand the present system of wholesale importation and manufacture of adulterated and counterfeit goods.

A new industry—the condensing of milk—has recently been started by the Melbourne Milk Supply Company. A number of gentlemen met at the office of the company a few days since, when a tin of the "Milkmaid" brand, which is the favourite brand of Swiss milk, was opened and tested with the Victorian condensed milk. A general opinion prevailed that the milk condensed by the Melbourne Milk Supply Company was quite equal, if not superior, to the best brands of Swiss milk. Mr. J. Bosisto, M.L.A., proposed the toast of "Prosperity to the new company."

The Queensland pharmacists are to be congratulated on their efforts to establish a pharmacy law in that colony. The Bill was introduced in Parliament by Mr. Griffiths on August 11, and its general principles agree very closely with

the Victorian Act. Provision has, since 1867, been made under the Medical Act for the registration of pharmaceutica chemists; but the examinations were of a very attenuated character. Under the proposed legislation they will probably be much more stringent and satisfactory; although, in the absence of definite information and regulations still to be formulated, we cannot pronounce any opinion. In the Queens land Bill, we notice the following divergencies from the Act in force here: -An apprentice must have served three years, and pass an examination in materia medica, botany, and pharma ceutical and general chemistry. The same for assistants The Board of Pharmacy to prescribe regulations for exami nations. There is no mention of any examination in prac tical pharmacy. Every registered pharmaceutical chemistration to be registered without examination or payment of any fee There is no provision for a "modified examination." No penalties against adulteration of drugs. Any one using the title of "chemist and druggist," or "chemist," or "pharmacist," &c., on conviction, will be fined 201., or in default six months imprisonment. Any one fraudulently procuring registration will be fined 100%, or twelve months' imprisonment. No provision is made against prescribing or the practice of medicine or surgery, so we may conclude that the medical profession have not brought any influence to bear upon this

Mr. Rivers Langton, who came out to these colonies last year in connection with the firm of Langton, Edden & Co., has decided to establish himself permanently in this city, from which he will work Australia and New Zealand. Mr. Langton has been highly successful in his efforts here, and is personally popular. Recently he was elected an honorary member of the New South Wales Pharmaceutical Society, and before leaving Sydney was presented with the Society's diploma.

Mr. O. V. Morgan, one of the proprietors of THE CHEMIST AND DRUGGIST, is on a visit to Victoria. Mr. Morgan has already been to New Zealand and South Australia, and since his arrival in Victoria has visited the principal inland towns and seen all the sights in and around Melbourne. Prior to his departure for Sydney Mr. Morgan was entertained at dinner by Mr. Wm. Johnson, the Government analyst. Amongst the guests were Messrs. Bowen, Bosisto, Blackett, Brind, Lewis, Holdsworth, Rivers Langton, &c. In speaking of his experience of the various towns in Australia, Mr. Morgan stated that Melbourne was the most metropolitan city he had been in since leaving London. Mr. Morgan spoke in high terms of the hospitality shown to visitors to the Colonies.

The Adelaide Exhibition closed on September 14, and was in every way a success so far as the attendance of the public was concerned. In making the awards it is to be regretted that the Judges did not confine themselves to place the exhibits in the several classes only, but have in many instances added comments on the various productions.

The following are the awards of the jury appointed to examine pharmaceutical preparations:—

Judges: — Davies Thomas, M.D. Lon., L.R.C.S. Eng.; Charles Gosse, M.D.; V. E. R. Dumas, M.P.S.

Corbyn, Stacey & Co., London.—Pharmaceutical preparations. An exhibit of great excellence, combining extensive variety with novelty, in which also many new remedies are shown. First order of merit.

Southall Brothers & Barclay, Birmingham, England.—Drugs, surgical dressings, and pharmaccutical preparations. The jurors particularly admire the splendid exhibits of iron preparations, notably the sample of citrate of iron and quinine. These exhibits are most tastefully arranged, and deserving of special commendation. First order of merit.

Southall Brothers & Barclay, Birmingham, England.—Al cod-liver oil. The jurors think this oil justly deserves its name of Al, it being beautifully bright, and almost tasteless. First order of merit.

Richardson, John, & Co., Leicester, England.—Pure chemicals, cod-liver oil, emnlsions, &c. First order of merit.

Longmore, F., Melbourne.—Pharmaceutical preparations. The jurors have pleasure in calling attention to the very palatable preparations of fluid extract of malt, combined with the hypophosphites of lime, soda, potash, and iron. Commended.

Cumming, Smith & Co., Melbourne, Victoria.—Collection of acids, commercial, pure, &c. Highly commended.

Fanlding, F. H., & Co., Adelaide, Sonth Australia.—Collection of chemicals, including a splendid exhibit of aniline dyes. First order of

Faulding, F. H., & Co., Adelaide, Sonth Australia,—Pharmaceutical preparations. Very good. Second order of merit.

Jones & Co., Melhourne, Victoria.—Surgical appliances. Exhibit good. First order of merit.

Richardson, J., & Co., Leicester, England .- Coated pills. The jurors have pleasure in highly commending the finish and great variety of this exhibit, and desire to bear testimony to the perfect protection the coating affords from contact with the atmosphere. First order of merit. They also wish to express great approval of the ueat and varied collection of "pocket emergency" and other portable cases, and think they will prove especially useful to country practitioners in the Australian Colonies.

Warner, W. R., & Co., Philadelphia, America.—Coated pills. The jurors find that these pills have all the useful properties of other forms of coated pills, combined with the additional advantage of being sweet to the taste

and very readily soluble. First order of merit.

Evans & Wormull, London.-Surgical instruments. The jurors are much pleased with the high finish and usefulness of the articles shown aud have pleasure in noticing several ingenious modifications and improve-

ments in different instruments. First order of merit.

Rocke, Tompsitt & Co., Melhourne.-Silk elastic goods. The jurors have much pleasure in calling the attention of the medical profession and the public to the fact that articles of such excellence can be procured without having to send to distant countries, thereby incurring the risk of their being damaged by long sea veyages and change of climates. First order

Victory Mannfacturing Company, of Melbourne, Victoria-Samples of various kinds of court plaster, goldbeaters' skin, &c. Highly commended.

Walker .- Colonial glues. A varied and excellent exhibit.

The jurors have much pleasure in expressing their satisfaction at finding such an extensive collection of first-class drugs and chemicals. At the same time they cannot help expressing their regret that a greater number of surgical instrument makers and importers did not think it worth their while to exhibit. In re coated pills, the jurors desire to record their opinion that in many instances the pills subjected to their inspection were unnecessarily large, and, consequently, difficult to swallow. They would strongly urge upon manufacturers the advisability of making their pills as small as possible. They think this end could be attained without interfering with the efficacy of the medicines by the employment of the active principles in lieu of the more hulky preparations of drugs.

The Pharmaceutical Society of Victoria have decided to offer gold medals annually to the students at the School of Pharmacy who pass the best examination in materia medica, botany, and chemistry. The school, which has now been established some time, is progressing very satisfactorily, under the able direction of Mr. J. Cosmo Newbery.

Many of your readers will remember the name of Mr. Joseph Bosisto, M.P., in connection with Australian vegetation. Mr. Bosisto, having ascertained, by numerous experiments, that a valuable oil can be extracted from the desert scrub gum of Australia, known as the Mallee, has commenced the manufacture on a very extensive scale, and will, in a short time, be in a position to place this oil in the European markets, through his agents, Messrs. Grimwade, Ridley & Co., Bishopsgate Street, London. Mr. Bosisto informs me that this essential oil is one of the most powerful solvents of indiarubber, as well as resins difficult of solution, and it will, no doubt, prove of considerable value to manufacturers of indiarubber goods and varnish makers, as it can be supplied at a moderate price. When in full operation, Mr. Bosisto will employ from 40 to 50 hands, and I hope on a future occasion to send you a description of the works.

THE ADELAIDE EXHIBITION.

(FROM A CORRESPONDENT.)

TO some of your readers it may be new that an exhibition has been open in this city for the past few weeks. The bulk of the articles came from Melbourne; to these have been added "native industries," while many of the importors have fitted up cases with novelties selected from their latest shipments, the result being a highly creditable collection, which has been thoroughly appreciated by the residents of South Australia.

As your able correspondent in Melbourne reported somewhat fully on the various exhibits in Victoria, I feel that I can send you but little of interest. In passing through I noticed the stand of Messrs. F. H. Faulding & Co., the principal wholesale house in the colony. This firm make a good display of various pharmaceutical preparations, as well as virgin salad oil, baking powder, violet powder, and numerous proprietary articles. Messrs. Faulding & Co. are also wine producers, making a nice drinkable champagne at 12s. per dozen pints, 21s. quarts, wholesale. The prices are given in case any enterprising fellow druggist in the old country should feel disposed to enter on this line of business. Mr. Scammell, the leading partner in Faulding & Co., has a charming residence about two miles out of the city, where he and Mrs. Scammell entertain their friends in good old English style.

Messrs, A. M. Bickford & Sons, another wholesale firm, also make an excellent exhibit, appearing to pay particular attention to the manufacture of cordials, which are largely consumed in the *newest* world. In my hurried visit I came next to the stand of Messrs. J. Terry & Sons, the founder of which firm was a pharmacist, and the present head, I believe, a few years ago filled the high office of Lord Mayor of York. Messrs. Terry do a large business with the chemists in Australia and New Zealand, chiefly through the instrumentality of Mr. Rivers Langton, a name familiar to most English pharmacists. Among their articles I noticed medicated lozenges, general confectionery, jujubes and jellies, and beautiful samples of candied peel.

Close by is the exhibit of the York Confectionery Company, represented by Messrs. Virgoe, Son & Chapman. goods seem well prepared, but I am not aware that they have been successful in obtaining a share of the business

among the trade to whom your journal appeals.

Aërated waters are well represented by the famous house of Schweppe & Co. Here I would like to mention that, in my wanderings round the world, I have but rarely been unable to quench my thirst with Schweppe's lemonade or soda water. Messrs. Cantrell & Cochrane, of Belfast, also make a display. These gentlemen are extending their connections in the colonies; they, like Messrs. Terry, being represented by Mr. Rivers Langton.

Messrs. Southall Brothers & Barclay exhibit cod-liver oil, powdered drugs, and various preparations. Messrs. Corbyn, Staccy & Co. have a varied display, and so have Messrs. T. & H. Smith & Co. of their well-known goods. Messrs. J. Richardson & Co.'s coated pills are meeting with an increased sale; while their neat and varied "pocket emergency" collection meets with general approval, being well adapted to the wants of a new and thinly-populated country. Messrs. Evans & Wormull display surgical instruments, in which there are several modifications and improvements; the high finish of these goods is much admired. Perfumery is well represented by Messrs. Piesse & Lubin, and Messrs. Gosnell have also an effective exhibit.

MATCHES AND PATENT MEDICINES IN SWITZERLAND .-According to the Geneva correspondent of the Times (Oct. 29), a law has recently passed the Swiss Chambers which prohibits the manufacture and importation of matches into the composition of which yellow phosphorus enters. The only sort of match that can now be legally used in Switzerland is that known in England as "safety," and which has been there dubbed the "Federal match." This law was advocated in the interest of the workmen engaged in the manufacture—the manipulation of yellow phosphorous being, as is well known, very injurious to the health of the manipulators. The measure was doubtless well intended, but its effects so far are the reverse of encouraging. Federal matches are more than double the price of the old-fashioned sort; they are so sensitive that they take fire with a touch, and give rise to frequent accidents: and so many of foreign make are smuggled into the country (which, as Switzerland has no preventive service, can be done with impunity) that a once flourishing native industry is well-nigh ruined. The workmen's health is certainly protected, but they have been deprived of their means of living. Another measure of similar character has lately been proposed to the Chambers, and, after mature consideration, rejected by a considerable majority. This was a Bill for prohibiting the importation and sale of patent medicines containing ingredients of doubtful efficacy, or which are offered at prices beyond their intrinsic worth.

FORMULÆ OF SECRET MEDICINES.

The Formulæ given below are translated (by special permission of the author) from a German collection compiled by Mr. Edward Hahn, Apotheker. The names following most of the Formulæ are those of the authorities quoted for the analysis. The weights are almost invariably given in metric denominations. A gramme is equivalent to 15½ grains. The prices quoted are the nearest English equivalents to the original retail price.

[g. = grammes; p. = parts.]

CHEMISCH-HYDRAULISCHER UNIVERSAL-KITT—CHEMICAL HYDRAULIC UNIVERSAL CEMENT (Friedrich Reinöhl, Stuttgart).—A cement for iron, copper, and brass. Burnt marble and gum arabic. 500 g., 6s.—Hager.

UNIVERSAL - KRÄUTER - MAGEN - PRÄSERVATIV—UNIVERSAL HERBAL STOMACHIC (Dr. Borhaver, made by Albin Müller, Brünn).—90 per cent. spirit, 70 g.; sugar, 38 g.; aloes, 5 g.; extract of cinnamon, galangal, zedoary, angelica, cloves, gentian, quassia, 11.5 g.; water, 100 g.—Hager.

Hamburger Universal Lebensöl—Hamburg Universal Life Oil, Balsamum Vitle Hamburgense.—Clove oil, 4 p.; orange-peel oil, 4 p.; star-anise oil, 1 p.; spirit, 150 p.; coloured with alkanet. Sold in bottles containing 25 g. Dose, 12 to 16 drops in tea, coffee, or milk as a stomachic, carminative stimulant.—Huger.

UNIVERSAL MAGENBITTER — UNIVERSAL STOMACHIC BITTER (Dr. Roback).—Widely known as a remedy for stomachic and intestinal complaints. A not unpleasant, brownish-yellow, clear, bitter liqueur. Its principal ingredients are gentian and angelica, with traces of aromatics and acetic ether. It contains also 36 per cent. of spirit and 21 per cent. of sugar. $\frac{1}{4}$ litre, 1s. 3d.—Hager.

UNIVERSALMITTEL GEGEN RHEUMATISMUS—UNIVERSAL RHEUMATISM CURE (J. Janke, Berlin).—Ninety g. of fluid, which separates into two layers, and consists of rape oil, petroleum, turpentine oil, juniper oil, and water. 3s.—Schädler.

DR. MATTHAEYI'S UNIVERSAL PILLS (Fr. Jaspers, Cleve).—Shining black pills of ordinary size, consisting chiefly of ammoniacum, guaiacum, and senna leaves. 200 for 3s.—Schädler.

UNIVERSAL PUTZPULVER — UNIVERSAL POLISHING POWDER.—For steel and iron goods. Finely-sifted coalashes. 500 g., 9d.

BULLRICH'S UNIVERSAL REINIGUNGSSALZ—BULLRICH'S UNIVERSAL PURIFYING SALT (Bullrich, Berlin).—For removing impurities produced by imperfect digestion. Impure powdered sodium bicarbonate. 500 g., 2s.

UNIVERSAL-SEIFE—UNIVERSAL SOAP (Oschinsky, Breslau).—35 g. of a mixture of soap, 10; wax, 8; resin, 5; fat, 70; palm oil, 7; water to make 100, and traces of layender and rosmary oils. 1s.—Hager.

UNIVERSAL SPEISENPULVER—UNIVERSAL FOOD-POWDER (Dr. Gölis, Vienna).—Sodium bicarbonate, 84; cream of tartar, 6; sal-ammoniac, 1; prepared chalk, 4. 120 g., 1s. 1d. Hager.

RADHORST UNIVERSAL TEA (J. Seichert, Molken Kurorte, Roznau am Radhorst, Mähren).—For all diseases of the throat, lungs, heart, stomach, &c. The tea, in packets of 120 g., consists of the cheapest and commonest herbs, such as triticum repens, bittersweet, willow bark, marshmallow, coltsfoot, betony, sage, poppy-heads, and the like.

Breslauer Universum—The Breslau Panacea (Osear Silberstein, Breslau).—For strengthening and purifying the blood and juices. Weak spirit, with an admixture of spirit of mustard or seurvygrass, hardly recognisable by taste or smell. 25 g., 3s.—Hager.

Da. MEYER'S UNTERLEIBSPILLEN—STOMACHIC PILLS (from the Löwen-Apotheke, Berlin).—Inspissated ox gall, 7 g.; soap, 5 g.; liquorice juice, 2 g.; with some organic powder such as jalap, rhubarb, or marshmallow, made into 120 pills, weighing '13 g. each.—Huger.

MISCELLANEOUS FORMULÆ.

AQUEOUS SHELLAC VARNISH.—A varnish for covering maps, photographic prints, &e., can be readily prepared, as have found by experiment, by merely shaking together two parts of a saturated solution of borax and one part of pulverised shellac, applying no heat. Solution will be effected in two or three days. In three parts, however, the shellad is easily soluble. Bleached shellac must be preserved underwater, and must be dissolved immediately after being powdered; for if the powder be exposed to the air for several days it will dissolve only with great difficulty, and perhaps not at all. If in preparing the varnish a higher temperature than 50° or 60° C. is employed, the liquid is apt to assume a faint reddish colour; the finished varnish however, bears heat very well. Now this varnish may not only be used for rendering pictures, prints, maps, &c., glossy but it forms an excellent starch gloss. In fact, this varnish will be found much more adapted for laundry purposes than any of the starch glosses found in commerce.—Dr. Geissler.

CODLIVER-OIL JELLY.—R. R. Fairthorne recommends the following form in the American Journal of Pharmacy for September. Put 5 fluid ounces of cod-liver oil and 2 drachms of best isinglass with 1 fluid ounce of water in a water-bath, heat until the isinglass is melted; add 1½ oz. of powdered white sugar, 4 drops each of oils of bitter almonds and allspice, and two drops of Ceylon oil of cinnamon; remove from the heat, and stir the mixture until it thickens. The jelly should be kept in corked bottles; it may be taken in water, milk, or wine, without tasting the oil.

EFFERVESCING POWDER OF ROCHELLE AND EPSOM SALTS.—

				LIDS.	OZ.
Potassii et sodii tar	tratis	 	 	5	10
Sodii bicarbonatis		 	 	2	14
Acidi tartarici		 	 	2	81
Magnesii sulphatis		 	 	Ι	9

Each ingredient must be very thoroughly dried, powdered separately, sifted, and all the ingredients thoroughly mixed. If not well dried the mixed powders set in a solid unsaleable mass. The taste of the Epsem salt is not perceptible.—R. R. Fairthorne, in Am. Journ. Pharm., September, 1881.

LAXATIVE LOZENGES.—Fairthorne recommends the use of pruue paste as an excipient for palatable laxative lozenges. The prune paste is made as follows:—Dried pruues are washed, stewed slowly with a little water, barely enough to cover them, until quitc soft. They are then rubbed in a large mortar so as to crush the fruit, but not the stones. Transfer to a coarse straining cloth, and squeeze the pulp through. This should be about the consistence of honey in winter. Laxative lozenges may be made by making compound liquorice powder, Ph.G., into a mass with this. They should weigh about half a drachm; dose, one or two as a laxative.

IMPROVED STARCH POLISH .-

							7 0110
Spermaceti				• •			1
Gum arabic		• •			• •	• •	I
Borax	• •						I
Glycerine							$2\frac{1}{2}$
Water			• •	• •		• •	21½

And a sufficient quantity of perfumed alcohol to produce an emulsion. About three teaspoonfuls of this emulsion are required for about $\frac{1}{4}$ lb. of starch.

IMPROVED STYPTIC COLLOID.-

					P	arts
Collodion				 	••	001
Carbolic aci	id			 	• •	10
Tannin				 		5
Banzoia aci	d (from	the cm	100			- 5

Mix the ingredients in the order above written until perfect solution is effected. This preparation has a brown colour, and leaves, on evaporation, a strongly-adherent pellicle. It instantly coagulates blood, forming a consistent clot, and a wound rapidly cicatrizes under its protection.—Monthly Review of Medicine and Pharmacy (Chicago.)

IMITATION GROUND GLASS.—A very useful kind of varnish is made known by Léon Vidal, which is excellent for producing imitation of ground glass, and will doubtless be found available for other purposes. The formula is :-

	Sandarac			••	 		18	
	Mastic				 	• •	4	
	Ether	٠.			 		200	
	Benzol			••	 		80 to 100	
ΟF	N SOLV	EN'	r.—					
	C 1 11						1 2 1	

.. 1 drachm 1 drachm 4 drachms Solution of potassa .. Tincture of iodine ... Glycerine 1 oz. Water, enough to complete

Canadian Pharm. Journal.

Mrs. Allen's Hair Restorer.—Marret in the Journal d'Anvers gives the following formula:-

> .. 1 69 (26 grs.) Sulph. precip. 0.20 (3 grs.) Pulv. cassiæ 32.00 (1½ oz. by weight) Aquæ destill. 63.46 (21 oz.)

Aromatised with a perfume containing nitrobenzol. The sugar of lead and the sulphur are first rubbed together, then the cassia and the water and glycerine added.

Mosquito Fumigating Pastilles.—Pharm. Zeitung recommends the following:-

> Charcoal 1 lb. Saltpetre Carbolic acid 2 oz. Carbolic acid Persian insect powder 1½ oz. .. 8 oz. Tragacanth mucilage, sufficient.

CREAM OF CAMPHOR.—

White Castile soap 3 oz. Boiling water, enough to dissolve it .. 4 drachms Carbonate of ammonia 4 drachms Camphor .. 4 drachms 2 drachms 2 oz. Water sufficient to complete 2 pints

Dissolve the eastile soap in four or five times its weight of boiling water, added gradually. Then add to it the carbonate of ammonia, and the camphor dissolved in the essential oils. Mix well, and make an emulsion. Lastly, add the laudanum, and enough water to complete the two pints.—Am. Drugg. Circ.

FIRE AND WATER PROOF PAPER. Mix one-third of ground asbestos fibre with two-thirds of paper paste in a solution of common salt and alum. Pass the mixture into a bath of dissolved gum lae and send it through the finishing rolls, when it may be cut into sheets. The salt and alum increase the strength of the paper and its resistance to the action of fire. The lac renders it impermeable to moisture, without interfering with its fitness for the reception of ink.

BLACK COLOUR FOR IRON.—A brilliant black is produced on iron and steel by applying, with a fine-hair brush, a mixture of turpentine and sulphur boiled together. When the turpentine evaporates there remains on the metal a thin layer of sulphur, which unites closely with the iron when heated for a time over a spirit or gas flame. This varnish protects the metal perfectly, and is quite durable.

To Destroy Worms.—Corrosive sublimate is used for the destruction of worms in grass plots, which, while it is a virulent poison, does not injure the grass. If applied in the evening, the worms will come up out of the grass; but birds or poultry swallowing them would be injured or killed. One ounce to fifteen gallons of water is the quantity usually employed. Lime water is as efficacious as the solution of corrosive sublimate, and involves no danger. It is much better, however, to disperse the worm-casts every morning with a broom than to destroy the worms. It is well known that these worm-casts, and the admission of air to the interior of the soil by the holes made by the worms, are very beneficial to the grass. The broom and the garden-roller are, we think, the best things to keep the worms in cheek. -Land and Water.

Medical Glennings.

CHAULMOOGRA OIL has been introduced into the medicine chests of the British cavalry regiments, on account of its remarkable effect upon horses that have been "wrung" with the collar or have sore backs from the friction of the saddle.

AWKWARD MEDICAL POLITENESS. — A physician was called to visit a lady living at a considerable distance from him. After continuing his calls for some time, she expressed fear that it would be inconvenient for him to come so far on her account, "Oh, madam," replied the Doctor, innocently, "I have another patient in the neighbourhood, and I can thus kill two birds with one stone."—Chicago Medical Reriew.

TREATMENT OF GONORRHEA.—Professor Ashburst, in a clinical lecture delivered at the Hospital of the University of Pennsylvania, said that in a simple uncomplicated case of gonorrheea he did not think internal medicines were requisite. When there is very painful scalding, relief is obtainable from the following mixture, which should be taken in divided doses within the 24 hours:—Linseed tea, I pint; bicarbonate of soda, a teaspoonful; and sweet spirits of nitre, a tablespoonful. In the local treatment of the early stages, he injects, every three or four hours, two syringefuls of argent. nitr. gr. ij., vini opii gt. xx.-xxx., aq. rosar, 3 viii. In the second stage he employs the following injection, in which a double decomposition takes place:-Liq. plumb. acet. 5vj., zinc. sulph. 9j., aquæ 3ij. If the diseharge still continues, he recommends sulphate of copper, 1 or 2 grains to the ounce. Later on, when it has become gleet, he has found tannic acid, weak at first, but gradually increased up to 3j. ad 3j., very effective. Glycerite of tannin may also be locally employed by means of a piece of cotton dipped into it, and put in at the end of a probe. When a slight stricture is present, a bougie should be passed to effect gradual dilatation, or a little mereurial ointment may be put on its end .- Med. Times and Gaz., from New York Med. Record, June 25.

President Garfield's Doctors. — The sad result of General Garfield's long struggle with death made the professional jealousy which existed in medical circles of small importanee. No doubt all was done that skill could effect; that has not been disputed. But the American medical journals have shown their animus against one of the President's attendants by very generally publishing the following story. It appears that Dr. Bliss, who had charge of the case, dropped into the opportunity to some extent by luck. A certain Dr. Baxter was the President's regular medical attendant, but he happened to be away from Washington when the wound was given. Dr. Bliss was called in and assumed the chief medical charge. Soon afterwards Dr. Baxter returned and called on Dr. Bliss, when, as reported by the former, the following conversation took place:-

"Dr. Baxter: 'Doctor, I have come to ask you to take me in to see the President.'

"Dr. Bliss: 'Well, I don't see the necessity of your seeing the President; I wish to keep him quiet.'

"Dr. Baxter: 'I make the request as the President's physician. I have for years been his physician.

"Dr. Bliss: 'Yes; I know your game; you wish to sneak

up here and take this ease out of my hands.'

"Dr. Baxter: 'I wish nothing, Dr. Bliss, except what I am entitled to. If the President prefers that you should take charge of his case, I haven't a word to say."

"Dr. Bliss: 'Well, you just try it on. I tell you that you ean't do it. I know how you are sneaking around to prescribe for those who have influence and will lobby for you.'

"Dr. Baxter: 'That is a lie!'"

That ended the conference, and Dr. Bliss retained his responsible but lofty post. Now the *Eelectic Medical* Journal informs us that this Dr. Bliss is the same as the discoverer who, ten years ago, striding the equator and beneath the shadow of Chimborazo, gathered that famous herb Condurango, which Messrs. "Bliss," Keene & Co. soon after announced to the world as "the great purifier" and wonderful cure of "cancer, syphilis, scrofula, rheumatism, consumption, catarrh, ulcers, salt rheum, and all chronic blood diseases."



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SEE SEABURY & JOHNSON'S Advertisement of INDIA-RUBBER POROUS AND SPREAD PLASTERS on page 107.

LLOYD'S UNIVERSAL FOOD.

The New Cooked Food for Infants, Children, and Adults, both in Health and Sickness. See page 52.

CHRISMA.

See page 108.

PURE COD-LIVER OIL.

See page 108.

JUJUBES.

See page 108.

MAY & BAKER.

See page 2.





COLONIAL AND BRITISH PHARMACY.

RECIPROCITY OF REGISTRATION.

WE rather regret the somewhat brusque reception which seems to have been given to the communication from the Pharmacy Board of Victoria to the Pharmaceutical Society of Great Britain, asking the latter to take into consideration the subject of making the certificates of the two societies interchangeable. It is quite true that, as the law now stands, the British Society has not legal power to place names on the register, except on the certificates of their own examiners; but it does not as certainly follow that the law is necessarily everlasting. The Colony of Victoria and other British Colonies have provided that the British Pharmaceutical certificate shall "lun" in their territories, and they have therefore no temptation to offer when they ask for reciprocal consideration. They are in fact in much the same position as is Free-trade England when she discusses a commercial treaty with Protectionist France or America. But it should be remembered that the advantage thus given by the Colonies is sure to be much more largely taken advantage of than would be a similar liberality on the part of the British Society. Pharmacists are much more likely to be exported from Great Britain to the Colonies, than imported from

them. At least we may hope that such will be the case. The Victorian Dispensing Tariff, which we published last month, suggests that pharmacists can still live there without pasturing on each other; and while conditions remain as they are on the two sides of the world, they will hardly care to come here to feed on the Proctorial banquet of lean and hungry apothecaries which is all we have to offer.

We are not by any means prepared to say that a Victorian or any other Colonial certificate should be accepted just as it stands, or without the fullest inquiry into the conditions of their examinations. There may be, too, some insuperable difficulties in the way of making certificates mutually interchangeable which have not occurred to us. But we are sorry, as we have already said, that the question has not been at least submitted to the whole Council for discussion. The British Colonies have a history to come. In the future perhaps it is rather they than the mother country who will have to uphold the honour of the Anglo-Saxon name; it is they who will go on to replenish the earth, and subdue it when the gunpowder-riveted despotisms of this century, to whom we are so anxious to be courteous now, are exploded or effete; and the forging of links of interest between these Colonies and Great Britain is a national service, which each section of our people may be proud to render. And we should have been glad if pharmacy could have taken some share in this patriotic work, by some practicable form of affiliation in regard to examinations.

INTERNATIONAL PHARMACEUTICAL COURTESIES.

LAST month we published letters from MM. Méhu and Patrouillard in justification of their reports of the International Pharmaceutical Congress which we had summarised in our previous issue. The third French report, which we had also quoted from, was written by M. Ferrand, and that gentleman replies to us through the pages of the Union Pharmaceutique, though he takes care to make it understood that he makes his observations "less for the purpose of replying to the criticisms than to show those who did him the honour of reading what he had written how correct he was in declaring that the German influence had been allpowerful at the Congress." M. Ferrand accepts humbly the merited reproach of an anti-Teutonic sentiment pervading his report, and he thinks the writer in these pages must be a little tainted with Chauvinism in holding cheap those events which touch Frenchmen more closely than they can do him. But he (M. Ferrand) would have veiled his sentiments if the resolutions of the Congress had not forced them out. M. Ferrand also complains that we had quoted his anti-Teutonic remarks, but had omitted his testimony of perfect esteem and gratitude to his hosts.

The letters which we printed last month from MM. Méhu and Patrouillard have commanded no little attention, and have called forth several replies. This month we publish a forcible but temperate reply to M. Méhu's strictures from the pen of M. von Waldheim, of Vienna. Meanwhile the Pharmaceutische Zeitung, the chief organ of German pharmaceutical opinion, has responded to the French attacks with a vigour of bitterness and mockery combined which leaves but little balance to the credit of France in these respects. The Pharmaccutical Journal, with questionable taste, but with obvious relish, quotes the most stinging passages from the German organ, as if to do what lies in its power to justify M. Méhu's suspicion of an "Anglo-German League." The British Pharmaceutical Council narrowly escapes being drawn into the controversy, but luckily the good sense of some of the members does prevent an unnecessary demonstration from that body, which would likely enough have brought it into direct collision with the Pharmaceutical Society of Paris, where M. Méhu's influence evidently prevails, for that Society has formally refused to accede to M. von Waldheim's request that they would furnish the International Pharmacopæia Commission with a copy of the Project of an International Pharmacopæia, which they have already prepared. Finally, M. Méhu again returns to the attack, but with evidently less bitterness, both in our own columns and in those of the *Pharmaceutical Journal* of last week. We take upon ourselves to assure him that the editorial reply in the latter journal does not represent the sentiments of English pharmacists generally.

We may seem to have had some share in this stirring up of strife—a part which, assuredly, we had no desire to play. The explosion had to take place, however, sometime and somewhere, and we presume no one is much the worse for the hard words which have been uttered. May we not hope that the combatants will now work harmoniously for a common benefit? French pharmaciens are surely not serious in supposing that there really did exist any secret "Anglo-German League," or in thinking that there was any purpose of treating their labours or their representatives with disrespect. M. Méhu has shown that the election of the officers of the International Pharmacopæia Commission (inter pocula, as he expresses it) was irregular. We are entirely of his opinion, and would suggest that when the Commission is fully formed the election be retaken by voting papers. We have no doubt that M. von Waldheim would be sure of M. Méhu's vote. But it is sincerely to be hoped that the French representatives will not withdraw their support from the scheme because they have been outvoted in regard to a detail. An International Pharmacopæia not recognised by France would be an absurdity. Tout homme a deux patries, la sienne d'abord, la France en suite. We believe the author of that observation was himself a Frenchman, but it is so far true that it is safe to predict that an International Pharmacopæia weuld be more largely used in France than anywhere else. The work can easily be finished in time for the Brussels Congress, three years hence, but it will not be done at all unless all parties are ready to give and take on a subject which, after all, would hardly seem capable of rousing so much earnestness and passion.

CULTIVATING SPONGES.

MESSRS. McKesson & Robbins, of New York, are now showing in their office a sponge of fine texture and in every respect perfect, measuring 7 inches by 8 inches, the history of the growth of which is exactly known. This piece of sponge is one which has been grown in Florida from a cutting about 2 inches in length and of triangular shape, "planted" only seven months previously. It has not been previously supposed, we believe, that sponge grew so rapidly.

The "planting" was a rather curious process. From a parent sponge were cut 24 of these triangular cuttings, and through each a stick was thrust, and then stuck in the sand on the sponge-bar close to the shore. The whole process was conducted under water, the sponge never having been lifted from its natural element. The experiment was carried out by a gentleman residing at Pine Key, Florida, who was interested in the sponge business.

The natural propagation of sponge takes place at certain seasons of the year, when yellow jelly-like grains sprout from the substance which covers the skeleton of the sponge, projecting more and more, and gradually increasing in size. Each germ assumes an egg-like shape, and a large portion of its surface becomes covered with cilia all endowed with

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the power of vibration. These vibrating hairs act as oars to the little germ to row it away as soon as it is freed from its parent to some other spot to which it may attach itself; and then having answered the purpose for which they were expressly developed, the cilia fall off, leaving the germ gradually to develop the peculiar form and qualities of the parent sponge. This experiment at Pine Key now proves that the cultivation of the sponge artificially is not only practicable, but that a "crop" may, under favourable circumstances, be secured by this means in a much shorter time than by awaiting the ordinary course of nature. The experiments will doubtless be continued, and it will not be long before ground will be staked for "sponge beds," as it is for "oyster beds."

As the Mediterranean sponges are generally fished from deep water, it is probable that the experiment could not be so easily repeated there, but the result of the process in America will be watched with much interest, especially as Florida sponge has of late gone up considerably in value.

THE FOOD EXHIBITION.

THE Brewers, the Mineral Water Trade, and the Food Exhibitions have been held during the past month at the Agricultural Hall, and seemed still to retain the popularity and attention which justifies their continued existence. Detailed reports of the exhibits at these shows would only involve the repetition of comments whith we have often made previously. The organisers of the Food Exhibition are ambitious enough to employ a jury of eminent experts to award distinctions. The jury consisted of Messrs. II. C. Bartlett, Ph.D., G. W. Wigner, F.C.S., J. Milner Fothergill, M.D., and J. Danford Thomas, M.D., and their combined opinions have just been issued in the form of a tract with two pages of report, which is offered to the public for the sum of twopence, or one halfpenny for each opinion. They have come to the conc'usion that "greater attention appears to have been paid to the purity and quality of the goods exhibited" since the establishment of this exhibition, which naturally gives these gentlemen that peace of soul which only the consciousness of having done good to others can bestow. Noteworthy improvements they find have been made in the canning of foreign foods, and though they "cannot say that the difficulties have been altogether overcome, there has been a marked advance since last year." English preserved meats, jams, &c., they find of the highest quality ever presented to their notice. Pickles and jams, perfectly genuine, and of the highest quality, are offered for sale "at prices which are comparable with those ordinarily paid," whatever that sentence may happen to mean. The report says:- " As regards the aërated waters and other 'temperance' drinks, we have analysed every beverage exhibited, and they are all nonalcoholic. The flavour of these 'temperance' beverages shows, in many instances, a very marked improvement, and in most cases there is no excess of medicinal constituents, the flavour being now due to fruit extracts instead of to objectionable artificial essences." "All the Foods specially put forward for infants fall short in those soluble nutritive matters which are essential. These foods are all too starchy." Among the awards we note the following:

AWARDS.

Silver Medals.

Challen, D., 121 Millmay Road, N., for vanilla, flavouring essences, and Wilson's American biscuits.

Yeatman & Co., New Bond Street, W., for yeast powder.

Evans, Sons & Co., Hanover Street, Liverpool, for lime-fruit preparations and lime-juice sauce.

Vin-Santé Co., for orange and tonic champagne and vin-sauté.

Aylesbury Dairy Co., St. Petersburgh Place, Bayswater, W., for peptonised milk and koumiss.

Freeman & Hildyard, 27 Great Dover Street, Borough, S.E., for digestive baking powder.

Zoedoue Company, Wrexham, for zoedone, dry and sans sucre.

Burgess, J., & Sons, 107 Strand, fcr preserved anchovies, sauces, and pickles.

Bronze Medals.

Brand & Co., 11 Little Stanhope Street, W., for albuminous and other concentrated extracts of meat.

Edmunds, J., 134 Pentonville Road, for curry powder and condiments.

Chemists' Aërated and Mineral Water Association (Limited), 45 Gifford Street, N., for B.P. aërated waters.

Begg, J., & Co., Manchester Road, Bolton, for Chili moselle, ginger-ale, and lemonade.

Skinner, G. H., 13 North Street, Exeter, for quinine sparkling tonic, and orange champagne.

Pfleiderer, P., 37 Farringdon Street, E.C., for mixing machines.

Delacre's Extract of Beef Company, 48 King William Street, E.C., for extract of beef.

Savory & Moore, 143 New Bond Street, W., for pharmaccutical preparations.

Montauban & Co., 5 Sugar Loaf Court, Leadenhall Street, E.C., for chocolatine.

Honourable Mention.

Noble & Co., 3 Savage Gardens, Tower Hill, E.C., for Bjorkboni's malt extract (simplex).

Goundry & Co., 181 Upper Thames Street, E.C., for consolidated tea.
Day, E. C., M.R.C.S., 78 Waterloo Road, S.E., for improved feeding-bottles,
Branson & Co., 10 Rood Lane, E.C., for coffee extract.

WEIGHTS AND MEASURES.

THE Report by the Board of Trade on their proceedings and business under the Weights and Measures Act, 1878, was ordered by the House of Commons to be printed, on August 3. There are but few points in it which will interest Pharmacists.

Appendix No. 4 is a list of places having Standards of Apothecaries' Weights and Measures. The following places have standards of both weights and measures. Counties:—Derby, Middlesex, Stafford (South), Suffolk, Surrey, Warwick, York (West Riding), Carnarvon, Merioneth, Radnor, Dumfries and Burghs of Dumfries, Annan and Lochmaben combined. Boroughs:—Berwick-on-Tweed, Birmingham, Birkenhead, Blackburn, Brighton, Bristol, Cambridge, Carlisle, Chichester, Dorchester, Hastings. Weights and Measures: King's Lynn, London, Manchester, Northampton, Nottingham, Oxford, Poole, St. Marylebone, Salford, Sheffield, Southampton, Warrington, Westminster, Windsor, Wolverhampton, York, Aberdeen, Edinburgh, and Glasgow.

The following have Standards of Measures only. Counties:—Cambridgeshire (Isle of Ely), Chester, Isle of Man, Lancaster, Flint. Boroughs:—Bath, Colchester, Great Yarmouth, Huddersfield, Liverpool, Portsmouth, Stockport, Dublin. Standards of Weights only are in the hands of the local authorities of—Counties:—Cornwall, Cardigan. Borough:—Havering Liberty.

In the Counties of England and Scotland the Standards will be in the charge of "the Justices in General or Quarter Sessions assembled." In English Boroughs the Mayor, Aldermen, and Burgesses acting by Council; in the Scottish Burghs the Magistrates are the local authorities.

It will be seen from this enumeration that the Act has not been so generally applied as had been expected. Other local authorities may have obtained Standards since the report reached the printer's hands, but chemists who live outside the places named may feel safe from molestation for a time. The apathy of the local authorities is very difficult to account for.

A COMMERCIAL NAME.

A CASE came before Mr. Justice Chitty, in the Chancery Division of the High Court of Justice, on Friday last, which curiously illustrates the right of property which the law recognises in established names. Two or three months ago two persons at Southsea, one named Enoch Day, an ironmonger's assistant, and the other Martin, a small tobaceonist, agreed to found a blackmanufactory, and describe themselves by their own names, Day and Martin. It happens that a firm so styled already exists in London and is not unknown to fame. The sole proprietor of the London business is a Mr. Clayton, and he has very promptly come down upon the new aspirauts by applying for au injunction to restrain them from selling blacking not only with labels or marks similar to those used by his firm, but with any containing the words "Day & Martin." Mr. Justice Chitty granted the injunction prayed for until the trial, which may or may not come off, at the same time expressing his opinion that the case was one of gross fraud and an unprincipled attempt on the part of the defendants to obtain the benefit of the plaintiff's longestablished business. If these two Southsea gentlemen feel that they really have a vocation for the blacking business we suppose they will uot be entirely shut out from it by the unfortunate accident of their names, but it will be more convenient for them and for all parties that Mr. Martin should assume the nominal headship of the new firm instead of Mr. Day.

UNFERMENTED WINES.

In the Analyst for November Mr. Carter Bell reports a number of experiments with grape juice, and with wines sold in this country professing to be pure, unfermented, and free from alcohol. His grape juices were either expressed by himself or by someone known to him, and include samples from English, French, Portuguese, Spanish, Champagne, and American wines. Fermentation was arrested by the addition of salicylic acid, or by raising the juice immediately after expression to the boiling point. In most cases the analyses were not made till six months after the expression. The specific gravities of these juices were found to vary from 1056 to 1107. The percentage of acid varied from 39 to 1.17 per cent., though two samples which had somewhat fermented naturally yielded rather more acid. The proportion of ash varied from .258 to .395 per cent., and Mr. Bell gives further tables which profess to record exact analyses of all these samples of ash. Then he compares with these results his examination of 14 samples of wines generally sold as unfermented and pure juices of the grape. In one sample sold expressly as "the selected wine of the temperanee fraternity," he found 30 per cent. of proof spirit. In "Castle Tent" and "Castle Rota Tent," sold as unfermented sweet wines, "with only the small amount of spirit necessary for its preservation," he found 14 per cent. of proof spirit. Some samples he judges by the difference of the ash are not pure grape-juices, but he mentions one kind, labelled "Unfermented wine, free from alcohol and unintoxicating, preserved in vacuo by ____," which was free from alcohol, and the ash of which appeared to correspond elosely with that from pure grape-juice. Other samples are reported with $1\frac{1}{2}$ and $2\frac{1}{2}$ per cent. of alcohol respectively. So it seems quite possible to put on the market a really pure wine without alcohol, or with no more than is contained in ginger-beer, and there is no doubt that such a product, reliable and carefully made, is wanted.

THE SOCIETY OF CHEMICAL INDUSTRY.

A LONDON LOCAL COMMITTEE of this Society has been formed, with Professor Abel as chairman, and the following gentlemen representing the varied sections of chemical industry also on the Committee:—

Mr. E. Rider Cook, Bow ,, W. Crowder, Millwall Dr. Charles Graham, University College Mr. B. J. Grosjean, Millwall

Mr. B. J. Grosjean, Millwall "David Howard, Stratford "E. Maxwell Lyte, Putney

,, F. Maxwell Lyte, Putney ,, G. Matthey, Hatton Garden Mr. R. Messel, Silvertown ,, B. E. R. Newlands, Victoria Dock

Mr. Thomas Royle, Victoria Dock
Mr. Thomas Royle, Victoria Dock
John Spiller, Hackney Wick
G. C. Trewby, Beckton
W. Weldon, Burstow, Surrey
Mr. John Williams, Hatton Garden

Meetings are to be held on the second Monday in each month from November to May. At the first meeting, held last night (November 14), Professor Abel addressed the members, and Dr. Messel read a paper on "The Want of Uniformity in Tables of Specific Gravity."

We understand that a Liverpool section of the Society has also been formed, with Mr. E. K. Muspratt as chairman, and Dr. Garriek, of St. Helen's, as hon. secretary. The first meeting of this section will be held in Liverpool on the 23rd inst.

A full report of the proceedings at the first general meeting of the Society, held in London last June, has lately been supplied to members. It contains all the papers read, and a verbatim report of the discussions. Mr. Maclean's paper on "Mechanical Furnaces," and Dr. Siemens' on the "Use of Coal-gas as a Fuel, are illustrated lithographically. The other papers were by Mr. E. K. Muspratt, on "Noxious Gases Legislation"; by Dr. Graham, on "Lager Beer"; and by Mr. Mond, on the "Patent Law with regard to Chemical Patents." The report extends to 160 pages, and our only criticism upon it would be that it is quite important enough to be worthy of an index, which we do not find.



Literary Potes.

Annals of Chemical Medicine, including the Application of Chemistry to Physiology, Pathology, Therapeutics, Pharmacy, Twicology, and Hygiene. Vol. II. Edited by J. L. W. Thudiehum, M.D. London: Longmans, Green & Co. 1881.

When the first volume of this periodical appeared, the fact that it was the first seemed to excuse the discrepancy between its title and the contents. With this second volume the excuse disappears. All the articles in the present volume, with one exception, are accounts of the editor's own rescarches, or his critical summaries of the state of our knowledge of various subjects. The one exception is a paper of less than two pages by George Thudiehum, student at St. Thomas' Hospital. We value Dr. Thudiehum's work too much to question his right to choose his own method of publication, but he would better avoid all chance of misleading young students if he chose some title which left more room for a belief that his researches or comments were not the only ones worthy of a place in the annals of his seience.

Although none of the papers in the present volume are directly pharmaceutical, some of them will be very interesting to the pharmaeist. The first that attract our attention are papers V. and VI., "Anæsthesia by Volatile Alkaloids, as Illustrated by Opium-smoking," and "On the Fate of Morphia in the Living Organism." In the former Dr. Thudichum devotes as much space to a critical examination of the statements of missionaries and others as to the actual

evil, and its extent, produced in China by opium-smoking. The article gives the impression that the writer has taken out a brief for the defence of opium. This is inevitable in the present state of affairs, when nearly all the information published emanates from the Association for the Suppression of the Opium Trade. Every one who tries to take an unbiassed view of the matter must insist on the points which the Association overlooks. Still we think the writer makes too little allowance for the witnesses' want of skill or practice in the description of facts of this kind. In the latter part of the paper he gives facts, very briefly and barely stated, which recommend the use of the opium-pipe in a variety of diseases. The paper on the fate of morphia in the living organism leads us to the conclusion that our knowledge is negative. It does not appear in the urine, it is not found in the blood and tissues, the tests applied to prove its presence are unreliable when it is mixed with other organic matters.

Another interesting paper is IX., "On the Nature and Functions of the Inorganic Constituents and Ingredients of Food, &c." This is a summary of several recent researches on the matter. The central facts are these: Potassium salts ingested into the blood are deadly poisons. Bunge found that ou taking 12 grains of potash as a salt with his food it was chiefly excreted in the urine in company with sodium and ehlorine, and caused a loss of the two latter amounting to half the total quantity contained in the blood. Thus potash, even in small quantity, withdraws chlorine and sodium from the body. To prevent the poisonous effects of potash in the food it is necessary to take proportionate quantities of sodium ehloride. Hence it follows that vegetable feeders require salt, while carnivora do not; that the Irishman who feeds on potatoes containing 22 parts of potash per 1,000 requires much salt, while the Hiudoo, living on rice containing only 1.04 parts of potash per 1,000, needs hardly any.

One omission in this paper ought not to pass without criticism, especially as it affects some of the arguments On pages 138 and 139 tables are given of the proportion of soda and potash in various vegetables. But we are not told if the proportions are calculated for the vegetable dried or undried, raw or cooked. Beans are said to contain 21 parts of potash per 1,000, and on the next page but one this and similar faets are made the ground of a sneer at the vegetarians. If the proportion of potash is calculated on uncooked beans the sneer is forceless, for boiling would reduce the proportion of this salt at least to that present in cow's milk.

Article XI. "On the Phosphorescence of Organic and Organised Bodies," summarises the results obtained in 1877 by Radziszewski. This investigator found that numerous bodies were phosphorescent in the presence of oxygen and an alkali, and further that the slow oxidation which took place under these circumstances invariably required an odd number of atoms of oxygen for its completion. Phosphorescence thus seems to be accompanied if not caused by the splitting up of the molecules of oxygen.

The volume contains many other interesting articles.

Select Extra-Tropical Plants readily eligible for Industrial Culture or Naturalisation; with Indications of their Native Countries, and some of their Uses. By Baron Ferdinand von Mueller. New South Wales edition, enlarged. Sydney: Thomas Richards, Government Printer. 1881. Pp. 9-403.

BETWEEN the years 1871 and 1879 five essays on the subject of this work were published in the transactions of the Victorian Acclimatisation Society. Since then they have been re-arranged, largely supplemented, and reissued in Victoria, in India under the auspices of the Central Government, in California at the instigation of Mr. Ellwood Cooper, late Principal of the Santa Barbara College; partial or gradual reprints have appeared in weekly journals in Sydney, San Francisco, and other places; and the volume before us bears on its title-page the legend "New South Wales Edition (enlarged)."

For 25 years Baron Mueller has held the position of botanist to the Government of Victoria, and the long succession of practical or sumptuous works which he has produced shows how aptly he fills the post. This fact and its own history show that this work is above criticism.

The book itself is an alphabetical list of extra-tropica economic plants, giving the scientific name, habitat, and vernacular name, properties, favourite soil, and allied plants. In the case of important plants details of methods of culture and preparation are also given, and the more valuable species are throughout indicated by asterisks.

At the end are a table of rainfall and temperature, and indexes of products, of genera arranged systematically, of

geographic habitats, and of vernacular names.

Only plants likely to live in the climates of Australia are admitted, so that the book will not, as it was not intended to, serve as a work of reference on economic botany. And from its nature no original information could be expected in it except on the uses and habit of Australian plants. This is only saying that the work is written for a special purpose, and no attempt has been made to do two things at once.

Bemerkungen zu den Beschlüssen welehe von der Kommission zur Revision der Pharmaeopwia Germaniea in den Sitzungen vom 15 bis 25 Oktober, gefasst worden sind, gesondert und geordnet vom Kaiserliehen Gesundheitsamte. Berlin: 1881. Folio, pp. 4—91. [Remarks on the conclusions arrived at by the Commission for the Revision of the Pharmacopoela Germanica at the sittings from October 15 to 25, classified and arranged by the Director of the Health Department of Germany.]

From the internal evidence it appears that the Revision Commission formulated 29 propositions, which were submitted for discussion to a large number of medical and pharmaceutical associations, and to certain prominent physicians and pharmaeists. The results of the discussions and the expressions of opinions have been collected by the Director of the Health Department, and arranged under the headings of the 29 propositions, so that the reader has before him all the opinions expressed on any particular subject.

As might be expected, some of the propositions excited much debate, while others awoke none at all. For instance, all approve of an alphabetical arrangement of the Pharmacopoeia, while the discussion of the question as to what medicaments should be admitted to the Pharmacopoeia fills 40 pages.

The conditions of pharmacy in Germany are so unlike our own that this report has little more than a theoretical interest for English readers.

Economy. By James Platt. London: Simpkin, Marshall & Co. 1s.

MR. PLATT'S series of treatises are becoming quite an institution of a semi-commercial semi-literary character. "Economy" is the fifth of his series of monogrammaticallyentitled works, the previous volumes of his library being respectively labelled "Business," "Morality," "Money," and "Life." We hope titles will last out for a long time yet, and, at the same time, we hope Mr. Platt will continue his essays until the supply runs dry; for, in truth, we begin to look for his annual contribution of clear headed common sense and somewhat dogmatic sermonising on the general topics of the hour, which the author always manages to introduce, with more or less appropriateness to his subject for the time being. Naturally in this new volume the fallacies of the "fair traders" and reciprocitists get rather rougher handling than their fragile nature is capable of standing; but Mr. Platt is no partisan, and Mr. Gladstone's senti-mental departures from rigid theory, especially in regard to his Irish policy, is dealt with in an equally severe manner. Without fully agreeing with Mr. Platt's observations, we recognise in them ideas well thought out and vigorously expressed, and in all a healthy, manly tone, the outcome of an extensive commercial experience. Mr. Platt is always the man of business, and never poses as a littérateur, and it is this feature which gives force and freshness to his writings. From his chapters on National Economy, Political Economy, Freedom of Trade, and Taxation, few readers will fail to gather information, and many will be able to acquire clearer ideas whether their conclusions coincide with those of the author or not.

WE have received the first number of a new weekly journal entitled *Knowledge*, edited by Mr. R. A. Proetor, whose talent for presenting scientific subjects in a popular style has become familiar by his lectures and writings to the inhabitants of three continents. *Knowledge* is sold at 2d., and well deserves success.

Scientific Notes :

On Chemistry, Pharmaey, Botany, Materia Medica, &e., Original, Selected, and Translated.

SEQUOIA LEAVES.*

G. Lunge and Th. Steinkauler, of Zurich, have examined the chemical composition of the leaves of Sequoia, or Wellingtonia gigantea, and have separated out—

1. Sequoiene—a crystalline substance having a composition

represented by the formula C13H10O2

2. Sequoia Terpin—a colourless oil, boiling at 155° C.;

sp. gr. 0.8522; composition, $C_{10}H_6$.

3. A colourless oil, resembling oil of peppermint, of an aromatic smell and burning taste; boils at 22° F. (230° C.); composition, $C_{18}H_{20}O_3$.

4. A small quantity of a heavy pyreumatic yellow oil, boil-

ing at 280-290° C.

CHINOLINE.

THE Pharmaceutische Zeitung, October 19, 1881, contains a useful and exhaustive article on the valuable substance Chinoline (see this journal March, 1881, page 121, and October, 1881, page 443), communicated by Messrs. Hofmann and Schotensack, chemical manufacturers, in Ludwigshafenon-the-Rhine, the pith of which, omitting that which has already been alluded to in this journal, is contained in the following:—

Preparation.— Chinoline is a constituent of coal tar and Dippel's oil, and may be separated out from these bodies. It has of late been prepared synthetically by acting upon aniline or nitrobenzole with glycerine in the presence of a dehydrating agent. The more general and advantageous way of preparing it, however, at present, is by distilling

cinchonine with potassium hydrate.

Properties.—Chinoline is a refracting, mobile, oily liquid, of a peculiar odour, boiling at 228° C. When freshly prepared, it is colourless, but darkens, however, upon exposure to light, without, as it seems, undergoing any chemical change thereby. The free base is insoluble in water, but easily soluble in alcohol, ether, chloroform, benzine, and the like solvents. Chinoline forms with acids, with the exception of tartaric acid, but difficultly crystallisable salts. Chinoline tartrate, which is the form in which the base is now chiefly employed, forms silky, shining crystals, which are sufficiently soluble in water, but not altered by exposure to the air. The salt smells like bitter almonds, and has a burning taste resembling peppermint water.

Administration of Chinoline.—As above mentioned, chinoline tartrate is the form of the base usually employed. It has the same appearance as quinine, and is given in the same way and in the same doses as the latter. Upon delicate stomachs chinoline is apt to act as an emetic, to prevent which, a teaspoonful of lemon-juice, or a piece of ice, is given. Not being bitter, chinoline is very useful as a sub-

stitute for quinine in the treatment of children.

Chinoline is, further, a very useful antiseptic dentifrice.

POWDERED EXTRACTS.

C. S. HALLBERG, of Chicago, read a paper on this subject at the last meeting of the American Pharmaceutical Association. Ordinary powdered extracts absorb enough moisture during very short exposures to render them a hard mass. The writer finds that this is due to the small percentage of admixture used. Samples of various extract powder, with the addition of 10 and 20 per cent. of milk sugar or dextrine, solidified in securely-corked bottles within a year, although the bottles had not been opened. The German pharmacopæia orders the powdered extract to be mixed with an equal weight of a neutral powder. This is the smallest practicable addition. But the variation in the yield of extract is so great even with the same lot of drugs that it is wiser to make the crude drug the standard and dilute the extract to half or some proportion of it. Nux vomica, exhausted with 95 per cent. alcohol, yielded 10 per cent. of extracts; with 85 per cent. alcohol, 12 per cent. of extract; 75 per cent.

alcohol, 14 per cent. extract; 70 per cent. alcohol, 16 per cent. extract. A satisfactory preparation of this troublesome extract was obtained by exhausting with benzine, which removed 5 per cent. of a fixed oil, but no alkaloids; and subsequent exhaution with 85 per cent. alcohol. Four per cent. extract was obtained, which was mixed with 6 per cent. of milk sugar and powdered. No satisfactory vessel has been proposed for drying and powdering extracts. Glass plates should be avoided as well as thin porcelain dishes, if they are considered valuable. A large shallow enamelled iron evaporating dish is the best. The extract should be thinly spread, and dried in a steam closet. When the extract becomes brittle at ordinary temperature it should be scraped off (care being taken to protect it as much as possible from the air), and immediately powdered with at least one-fourth the amount of the diluent. It should be quickly triturated with the remainder of the diluent and transferred to the widemouthed corked bottle.

DETECTION OF OIL OF ERIGERON IN AMERICAN OIL OF PEPPERMINT.

MM. F. VIGIER and Ch. Cloëz have treated this question in the Union Pharmaeeutique. The Canadian Fleabane, Erigeron eanadense, is very common in the mint fields; it yields a much larger proportion of essence than mint, and this essence quickly turns brown on exposure, and possesses an herbaceous taste and smell sui generis. It is one of the clief causes of the inferiority of some samples of American oil. The authors have examined its physical and chemical properties, and find that the following characteristics will indicate its presence to the extent of 8 or 10 per cent. in a sample of peppermint oil:—

Concentrated caustic potash solution does not saponify Erigeron oil, but colours it orange red in the cold; on heating the colour deepens till part of the oil separates as a red-dish purple viscid mass, This reaction does not show itself with oil freshly distilled at 170° C. Pure mint oils do not give this reaction; in the cold, caustic potash converts them into a white emulsion; on heating, the mixture takes a faint clear yellow tinge. But if a few drops of erigeron oil are introduced the orange-red colour appears quickly on shaking, and develop instantly if the tube is warmed. Mint oil is completely soluble, erigeron oil is completely insoluble in its own volume of 85 per cent. alcohol, at 15° C. a suspected sample be agitated with an equal volume of 85 per cent. alcohol, a milky fluid will be produced if erigeron oil be present, and the insoluble essence will separate in the course of 24 hours. The oils of eucalyptus globulus and turpentine behave in much the same way, and the points which would distinguish the three substances have not yet been determined. But a specimen of mint oil, which rotates the polarised ray feebly to the left, makes a turbid mixture with its own volume of 85 per cent. alcohol, and takes an orange red tint with caustic potash, may be safely rejected.

THE GOOD OLD TIMES,-The following, copied from an old book, will be read with regretful interest by modern dispensers:-"Died, at Heckington, aged 65 years, on May 17, 1817, Mr. Samuel Jessup, an opulent grazier of pilltaking memory. He lived in a very eccentric way as a bachelor without known relatives, and at his decease possessed of a good fortune, notwithstanding a most inordinate craving for physic, by which he was distinguished for the last 30 years of his life, as appeared on the trial for the amount of an apothecary's bill at the Assizes at Lincoln a short time before Mr. Jessup's death, wherein he was defendant. The evidence on the trial affords the following material for the epitaph of the deceased, which will not be transcended by the memorable life of any man. In 21 years, from 1794 to 1816, the deceased took 226,934 pills, supplied by a respectable apothecary at Botsford, which is at the rate of 10,806 pills a year, or 29 pills each day, but as the patient began with a more moderate appetite, and increasing it as he preceeded, in the last five years preceding 1816 he took the pills at the rate of 78 a day, and in the year 1814 he swallowed no less than 51,590. Notwithstanding this, and the addition of 40,000 bottles of mixture, julep, and electuaries, extending altogether to 55 closely-written columns of an apothecary's bill, the deceased lived to attain the advanced age of 65 years."

^{*} Berichte der deutschen chemischen Gesellschaft. October 24, 1881.



THE SPECTACLE TRADE.—LAWRENCE v. KNIGHT, AND KNIGHT v. LAWRENCE.

THIS case was heard in the Clerkchwell County Court, on October 28. Hy. Lawrence, of 44 Hatton Garden, sued George James Knight, chemist, of 452 Edgware Road, for 3l. 1s. 10d., the balance of an account; Knight admitted the claim, but brought a counter action to recover 33l. 7s. 6d. for breach of contract. Mr. Isaacs, a traveller in the employ of Lawrence, on July 30, 1879, persuaded defendant to become an agent for spectacles, representing that he would make 2001. a year by the agency. An agreement was drawn up by Isaacs, appointing him agent, with 40 per cent. commission and a free advertisement in the local papers, and signed by defendant after some additions had been made at his instance. The contract provided that the agency should be for twelve months, that at the end of that time defendant might relinquish the agency, and the balance of goods on hand should be either transferred to another agent or taken back by Lawrence. The defendant found the spectacles very unsaleable; about four pairs of the goods originally supplied had been sold, with four or five pairs obtained for special customers. The goods had been paid for by a bill, which was partly renewed at the end of six months, and was endorsed by Lawrence to Druiff. During the term of the agency defendant said he had made frequent and continued complaints both to the plaintiff's traveller and at the plaintiff's place of business in Hatton Garden, and he had repeatedly told them he must give up the agency when it expired. None of his letters to the firm contained any complaints, and defendant explained this by saying that in each case he had just previously called at Hatton Garden. Towards the close of the agency defendant wrote a letter to plaintiff giving notice of his intention to relinquish it. He could not say by whom this was posted, and had received no answer to it, although his other letters to the firm, chiefly orders for stock or show-cards, had always rcceived some acknowledgment. A few weeks after the end of the term of agency he sent an order for a special pair of glasses required by a customer. With that order he made no intimation that the agency had expired. Two assistants, who had now left his employ, were called as witnesses by Mr. Knight, who proved conversations which implied that the agency had been relinquished, but the dates of these were a considerable time after the termination of the contract. Without calling witnesses, the counsel for Mr. Lawrence contended that the evidence had not proved that due notice had been given of the intention to relinquish the agency, and that there had consequently been no breach of contract. The Judge was of opinion that the evidence did not prove to his satisfaction that notice had been given, and, consequently, non-suited Knight on his counter claim, and gave judgment for Lawrence in the uncontested claim for balance due, with taxed costs in both actions.

BANKRUPTCIES AND LIQUIDATIONS.

EVANS & CANT, Aniline Dye Manufacturers and Patentees, Stratford.

THE debtors, carrying on business at the Eastern Chemical Works, Marshgate Lane, Stratford, filed their petition for liquidation on August 8, and furnished a statement of their joint affairs, disclosing unsecured debts 2,699l. 8s. 10d., and debts fully secured 4,230l., against assets of the estimated value of 1,800l. 16s. 9d. At an adjourned meeting of the creditors held on October 6 resolutions were passed for the acceptance of a composition of 7s. 6d. in the pound, of which 5s.

was to paid in 21 days, and 2s. 6d. in six months from registration. The case came before Mr. Registrar Broughan on the 10th inst., upon the hearing of an application of behalf of Mr. Henry Garrod, of 10 Arthur Street West, at unsecured creditor for 688l. 12s. 2d., for an order that the debtors should be adjudicated bankrupt upon the ground that the composition arrangement could not proceed withou injustice or undue delay to the creditors. It appeared from the affidavit of Mr. Garred that no security had been provided for payment of the composition, and the resolutions were passed in the belief that the debtors would be able to use their manufacturing premises at Stratford under arrange ment with the mortgagees, and dispose of their stock in the ordinary course of business, thereby obtaining funds for pay ment of the composition. The mortgagees had, however since threatened to sell the premises, and a sale was adver tised for the 23rd inst. The premises were placarded with posters, and the business was entirely stopped and ruined, so that the debtors would be unable to pay the composition as they were wholly without means. It was therefore necessary that the estate should be wound-up in bankruptcy. No cause was shown against the application, and Mr. Registral Brougham made the adjudication.

J. A. FERRIS, Chemist and Druggist, Buckingham Palace Road, and Victoria Square, S.W.

The bankrupt had presented a petition for liquidation, estimating his liabilities at 2,500%, but the proceedings became abortive, and adjudication was made in August last upon the petition of Mr. Alfred Barnaud, advertising agent, 49 Fleet Street. The meeting for public examination was held on the 10th inst., before Mr. Registrar Brougham. The trustee (Mr. T. S. Evans) said that the accounts had not been filed, and there must therefore be an adjournment. Mr. Grain, who appeared for the bankrupt, said that the accounts would be ready in about ten days. An adjournment was ordered to December 8.

JOHN KERR DEANS, Stirling.

JOHN KERR DEANS, dentist and chemist, Stirling, was before the Edinburgh Bankruptcy Court on October 24 for examination. Bankrupt said, in answer to Mr. Turner, trustee, that he started business as chemist and druggist in Galashiels, in 1868, without any capital. He had acted previously as manager to Dr. Buchan, who handed over the business to him when he (the doctor) left that town, for 350l., to be paid by instalments. He paid that in about two years. He ceased to carry on that business in 1875. He never made out a balance-sheet. He considered that his yearly income at Galashiels, after deducting all business expenses, would amount to about 1601. His household expenditure would exhaust the whole of that income. He was married in March, 1875. Previous to that date he was in lodgings, and was thus able to pay off Dr. Buchan. In 1875 he might be about 100% in debt, because his stock had increased to that extent. His household furniture would be worth about 150l. When he left Galashiels in 1875 hc paid his creditors a composition of 8s. 6d. per 1l. under a trust-deed executed in favour of Mr. Rutherford, writer, Galashiels. He commenced business in Stirling in May last. In the interval he had been in America. On May 23 last he borrowed 100%, from his trustee, which he received in cash, to enable him to resume business. In September last he furnished the trustee with a detailed account of how that 100% was disposed of. The trustee wrote him for an amended statement. He did not reply, because he had not a penny to pay for postage; but he ultimately did so. At present he had no fixed place of residence. Last night he slept in a common lodging-house in Cowgate, for want of funds to get a better place. On the motion of the trustee, the inquiry was adjourned.

ALEXANDER MANBRÉ, Brewers' Chemist, Whitechapel.

THE bankrupt, who carried on business at the Sugar House, Goulston Street, Whitechapel, was adjudicated in September, 1879, and he applied to the Court on the 4th inst., for his order of discharge, in pursuance of a special resolution passed by the creditors attributing his bankruptcy and failure to

pay a dividend of 10s. in the pound to circumstances for which he could not justly be held responsible. The unsecured debts were stated in the accounts at 2,829l., and debts fully secured 5,900l., and the assets disclosed a considerable surplus subject to realisation. Mr. E. C. Willis supported the application; Mr. Harston appeared for the trustee, and said that he had no objection whatever to the bankrupt receiving his discharge. Mr. Registrar Hazlett accordingly granted the order of discharge.

Poisoning Cases.

ACIDS.—Charles Donnison, plumber, killed himself at Liverpool, on October 18, by taking three pennyworth of spirits of salts.

AMMONIA.—Alexander Robinson, coachbuilder, died in the Newcastle Infirmary, on October 17, from the effects of a quantity of ammonia taken 17 hours previously.

ANODYNE CORDIAL.—A child, 17 days old, son of John Mason, of Sheffield, died on October 23, from the effects of an overdose of anodyne cordial. This was made by Arthur Fallding, chemist, was labelled "Poison," and contained about one drop of laudanum in twenty. The mother had asked a neignbour for a dose. The neighbour found the bottle was nearly empty, and thinking there were about seven drops in it, poured the whole into the glass sent for it. This was given to the child, which became comatose, and died four hours later. The jury returned a verdict of "Death from an overdose of anodyne cordial; and further, that Ellen Robinson, the woman who sent the cordial for deceased, knowing his age at the time, is guilty of gross negligence in not having correctly ascertained the actual quantity sent, and that she is highly censurable." Mrs. Robinson was then severely reprimanded for her carelessness.

Belladonna.—On October 7, Mr. R. N. C. Maclean M.R.C.S., of Notting Hill, committed suicide by taking, it is supposed, a quantity of some preparation of belladonna.

CARBOLIC ACID.—Lucy Driver, of Oldham, was charged, on October 17, with attempting to commit suicide by taking carbolic acid.

CYANIDES.—On October 15, Edwin Arthur Fox, druggist, aged 31 years, late in business at Copmanthorpe, near York, committed suicide at York, by taking some salt of prussic acid. His business had been sold up at Whitsuntide, and he was in straitened circumstances.

LAUDANUM.—On October 9, a woman, named Elizabeth Johnson, was left alone for a few minutes in the surgery of Dr. Fyson, 194 Blackfriars Road. She seized the opportunity to take a quantity of tincture of opium from one of the surgery bottles. An emetic was administered, and she was taken to St. Thomas' Hospital.—The following deaths have resulted from taking laudanum: October 26, A. G. G. Anns, aged 22, Nunhead; November 2, Mary Ann Beadle, 50, Frindsbury, near Rochester; October 22, man unknown, linen marked "White," at a lodging-house in Spitalfields; October 25, St. Ernest Pelham, surgeon, 46, Sutton-in-Ashfield.

MORPHIA.—Mary Ann Nicholson, of Hull, who had for years been in the habit of taking morphia pills for neuralgia, was found dying on October 23. According to the autopsy, death resulted from an overdose of morphia.

OXALIC ACID.—On October 8, Thomas Prout, a stranger, was charged at the Leeds Police Court, with attempting to commit suicide, by taking three quarters of an ounce of oxalic acid. Mr. Burchell, surgeon, had been successful in preventing fatal effects.

PURGATIVES.—An inquest was held at Islington on October 28, on the body of Fred. Dillnut, aged $4\frac{1}{2}$ years. Dr. John Bridgehouse, of 93 Tollington Park, stated that deceased was dead when he was summoned. On making a post-mortem examination he found death resulted from failure of the heart's action. The stomach and intestines were quite empty, no doubt owing to the strong purgative powder which had been given. From what he had heard of the case, he had come to the conclusion that death had been actually eaused by the strong purgative powder. He wished

it to be distinctly understood that to give a child a strong opening powder on the slightest appearance of sickness was to place the life of that child in great danger, and the jury knew that in the majority of instances parents flew to a chemist's for a powder.

PRUSSIC ACID.—On October 17, Dr. John Sergeant committed suicide, at 5 Derby Road, Weaste, Slcaford, by drinking a quantity of prussic acid.

STRYCHNINE. — Mary Ann Rollason, aged 52, died at Ladywood, Birmingham, on October 13, rather suddenly. Analysis of the viscera revealed the presence of strychnine, but there was no evidence to show how the poison was obtained or administered.

VERMIN-KILLER.—Rachel Floyd, aged 19, took some vermin-killer, on October 4, and died on the ninth day after. She told no one that she had taken the poison till the fifth day.

FOOT-ROT CURE.—On October 15, a girl 2 years old, daughter of R. Sampson, of Tolgrogan, St. Allen, Truro, died from the effects of a poisonous cure for foot-rot. She drank some of this from an old bottle which had been cleared out of a cupboard.



RIMMEL'S ALMANACS.

Mr. RIMMEL'S ALMANACS FOR 1882 will be found of unusual excellence. The one in book form contains, besides a calendar and postal information, six pretty designs in colours, called Northern Flowers, and representing Muscovite, Scandinavian, Alsatian, Helvetian, Batavian, and Caledonian types of beauty. The Comie Pocket-Book Almanac, which unfolds in panoramic form, contains a calendar and a number of very clever and fantastic sketches, also in colours, representing "Beaux and Belles of Yore" engaged in various seasonable occupations—such as skating, boating, hop-picking, and other amusements-winding up, of course, with a salute under the mistletoe. The almanacs are, of course, perfumed, and either sells for 6d. retail. Chemists might doubtless sell some of these, and even if they should fail to do this, a judicious distribution of those remaining on New Year's Eve among select customers would not, perhaps, prove an unprofitable sprat to throw into the sea of 1882.

BARNETT & FOSTER'S FRUIT CHAMPAGNES.

At the recent Mineral Water Trade Exhibition, Messrs. Barnett & Foster attrac ed the attention of most of the visitors by their new fruit champagnes, which were then brought before the public for the first time, and the manufacture of which, as proposed by the inventors, involves an elaborate and carefully-thought-out scheme.

They propose to grant licences, for a moderate annual fee, to any aërated-water maker to manufacture these fruit champagnes. Any one with soda-water machinery, and with about 20% to 30% worth of new accessories, can go into the trade. The chief expense necessary is a new corking-machine, which Messrs. Barnett & Foster have patented, and which enables the bottles to be corked with the bulbousheaded corks so characteristic of champagne. The licensee is bound to certain limits of price in order to maintain a good profit for everybody. He is furnished with the recipes for all the varieties of the fruit champagnes, and Messrs, Barnett & Foster supply the essences, labels, and, in fact, all the necessaries. The idea is to create a monopoly among a large number of independent workers, and it is obvious that

the more there are who work it the better will the article be advertised.

The fruit champagnes as put up by Barnett & Foster are very pleasant beverages, and the style in which they are supplied is most attractive. There are seven varieties: pine-apple, lemon, raspberry, orange, pear, strawberry, and ginger. The labels are printed in colours on a jet-black ground, and with representations of the various fruits. In all other respects the champagne style is imitated perfectly, and the inventors wisely make very prominent the importanee of always serving these beverages in champagne glasses. We may remark that zoedone, vin santé, phosphodone, and the rest, should always be served in champagne glasses. The glasses do not wear out, and eonsumers think very much more of their sixpennyworth if they get it with something like style connected with it. Messrs. Barnett & Foster are spending a great deal of money to work their seheme effectively, and they are not the sort of people to fail. The product will certainly be popular as a ball-room, garden party, and generally fashionable non-intoxicant beverage, and will add to rather than supplant the regular aërated-water trade. We can but think that those who associate themselves with the inventors in this enterprise will reap a fair share of the profit.

KILNER BROTHERS' FEEDING-BOTTLES.

MESSRS. KILNER BROTHERS, the eminent glass-bottle makers, have directed their attention to the manufacture of feeding-bottles, and they propose to supply them direct to chemists. They make three varieties of "Our Babies' Bottles" to sell at 6d., 1s, and 1s. 6d, and another 1s. variety called "Our Darlings' Bottle." All are made with bent necks, and the fittings are excellent. The 1s. and 1s. 6d. feeders have a short piece of glass tubing between the cork and the teat, so that the nurse can see that the milk flows freely, and to facilitate cleaning. Messrs. Kilner Brothers offer these feeders on good terms, and as an inducement for trial orders they put up cases containing an assortment for 10s., 20s., or 30s. The first, sold at marked prices, would realise 17s. 6d.

BURNS'S PATENT BOTTLE-LOCK.

An invention, which is worth a good deal of attention from pharmacists, has been patented by Messrs. Thomas Turner & Co., of Wolverhampton. It consists of a nickel-plated cover, adapted to fit over the cork or stopper and the lip of a bottle in such a way that it cannot be removed or the contents of



the bottle reached until this cover is unlocked. The cover is readily put on the bottle, and closes with a spring: it can only be unlocked by a key. The invention was originally designed for wine and spirit bottles, which it was desirable to keep from unauthorised tasters; but Messrs. Turner &

Co. have also made locks on the same principle intended t cover bottles containing poisons. Any chemist who keep poisons in or near his dispensing department will feel more secure if the bottles are protected by these locks. It is quite impossible that anyone would unlock and remove the cover if he should happen to mistake one bottle for another We should be glad to hear that the inventors could see their way to making on the same principle something of a much slighter and cheaper character, which could be attached to bottles of poisonous liniments or lotions. Even at the present price many customers would be glad to avail them. selves of the protection afforded by these locks, but something of the same sort, at a much lower price, would sell by the gross where these cannot be expected to be taken at more than by the dozen.

Trade Notes.

Messrs. Hodgkinsons, Stead & Treacher announce that they have now removed into their new premises, 198 Upper Whiteeross Street, E.C.

MESSRS. SAMUEL GULLIVER & Co., mineral water manufacturers, Aylesbury, have opened a London office and stores, at 14 Bow Lane, Cheapside.

MESSRS. JOHN GOSNELL & Co., of London, have arranged to commence the manufacture of perfumery at Melbourne in conjunction with Messrs. Felton, Grimwade & Co.

Mr. Wm. Banbury has sold his business at Great Marlow to Mr. Barnal Harman, from East Cowes, I.W. Messrs. Orridge & Co. valued for both parties.

MR. M. HOFF informs us that by Letters Patent he has been appointed Purveyor of Malt Extract to H.R.H. the Princess of Wales.

The business of Mr. A. Archer, Woodhouse, near Sheffield, has been purchased by Mr. J. Harcus, of South Shields. The transfer was conducted through Mr. Brett, of Leicester.

A GOLD MEDAL for "sanded and sandless sponges of all kinds, and superiority of colour," has been awarded to Messrs. R. Cresswell & Co., of Red Lion Square, at the Brussels Exhibition, 1881.

THE business of the Wilhelms Quelle Company (Limited) has been removed from 7 Billiter Square, and placed solely in the hands of Messrs. W. Hudson & Sons, 37 Moorgate Street.

THE MALTINE MANUFACTURING COMPANY (Limited) has removed from Great Russell Street to handsome and commodious offices at 24 & 25 Hart Street, close to Bloomsbury Square.

Messrs. W. Butcher & Co., the well-known wholesale homœopathic chemists, of Blackheath, have lately bought the homœopathic pharmacy earried on for twenty years by the late George Clayton, of 315 Regent Street, and have aequired his proprietary articles therewith.

MR. FILMER KIDSTON, the well-known chemist's shop fitter, has retired from active business, and has sold the stock and goodwill of his business at Duke Street, Brushfield Street, Bishopsgate, to Messrs, W. J. Lemaitre & Co., shopfitters and glass-sign writers, of 66 Pentonville Road, who will carry on both businesses.

MESSRS. BOWLING & GOVIER, who have been associated with Mr. Kidston, state that their agreement of partnership with him having expired, they will carry on the business of shop-fitters at Gun Street, Duke Street, Bishopsgate.

WE HAVE RECEIVED from Messrs. Squire, Fox & Co., of Hart Street, Bloomsbury, a sample of "Koptica," a remedy which they are introducing for neuralgia, rheumatism, and similar complaints. It is sold in the form of a white sweet powder, and the makers guarantee that it contains no colchicum, henbane, belladorna, aconite, or any deleterious drug. They show numerous testimonials of its efficacy.

Bew's Remedy, the wholesale agency for which has been recently taken up by Messrs. Evans, Sons & Co., of Liverpool, has had for some years a local reputation, especially as a cure for rheumatism. Mr. Bew, who makes it, first cured himself of rheumatic gout by its use, and has since then given it away to his friends, and apparently to all who applied for it. A great number of letters are published from people who have been healed or relieved by it of rheumatism, piles, asthma, &c. It is sold either as an ointment in pots or as a candy in tins, and is recommended to be both taken and applied. Mr. Bew evidently believes in his discovery most fervently, and very probably, as often happens, the preparations have virtues. With a true naïveté, he closes his eulogium of it by remarking that "the circumstances under which Mr. Bew's remedy proves of universal benefit are so various that the best course is for each family to subject it to trial for almost everything, and then judge for themselves."

NEW COMPANIES.

A. W. Hall & Company.—Offices: No. 41 Above Bar, Southampton. Objects: To purchase from Λ. W. Hall and T. A. F. Hall, now carrying on business as chemical manufacturers, merchants, and brokers at Redbridge and Southampton, under the style of "Λ. W. Hall & Company," the goodwill and their business, with land, buildings, plant machinery, and fixtures for the sum of 22,000ℓ, also to purchase at a valuation the stock-in-trade and sundry utensils. Capital 50,000ℓ, in 500ℓ. shares.

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THE MYERS' CATTLE SPICE COMPANY.—Objec's: To purchase the goodwill of the business for the manufacture of "Myers' Royal Cattle Spice," carried on by Mr. Thomas Myers, at Hull, and Navigation Road, York, together with his interest in mills, plant, and machinery, and the recipes for making cattle-spice. Capital 30,000l., in 5l. shares. The names of directors are not specified, but their qualification is the holding of 100l. in shares or stock. The remuneration (other than the managing director) is not to exceed 500l. per annum, divided as they deem fit.

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ÆSCULAP BITTER WATER COMPANY (LIMITED).—Upon terms of an agreement of August 28, between Theodore Young Kelly and Robert Warner, this company proposes to acquire the mineral spring known as the Æsculap Bitter Water Spring, and the property containing the mineral wells, situate near Buda-Pesth, in Hungary, together with the business of selling the said bitter water carried on by Mr. J. O. Kelly. It was registered on September 3 with a capital of 50,000l. in 10l. shares. The subscribers are: *H. R. Beeton, 6A Austinfriars, stockbroker, five shares; C. R. Crossley, 38 Poultry, advertising agent, five; *E. H. Bayley, 42 Newington Causeway, waggon manufacturer, fifty; M. M. Moore, 83 Lombard Street, merchant, fifty; Henry Clothier, Highgate, surgeon, fifty; Thomas Collyer, 14 Cannon Street, merchant, fifty; *C. F. Gardner, J. Wership Street, Einsburg, merchant, fifty, *C. F. Gardner, J. Wership Street, Einsburg, merchant, fifty, *C. F. Gardner, J. Wership Street, Einsburg, merchant, fifty, **C. F. Gardner, J. Wership Street, Einsburg, merchant, fifty, **C. F. Gardner, M. Wership, Street, Einsburg, merchant, fifty, **C. F. Gardner, M. Wership, Street, Einsburg, merchant, fifty, **C. F. Gardner, M. Wership, Street, Einsburg, merchant, fifty, **C. F. Gardner, M. Wership, Street, Einsburg, M. Wership, **C. F. Gardner, M. Wership, **C. F. Gard 1 Worship Street, Finsbury, merchant, fifty shares. number of directors is not to be less than three, nor more than seven; qualification, shares or stock to the nominal value of 500l; the first are the subscribers denoted by an asterisk; maximum remuneration, 250l. per annum. Mr. T. Y. Kelly is appointed managing director, at a salary of 500l. per annum. The directors are empowered to expend 12,000l. in advertising during the first three years.



[The following list has been compiled expressly for The Chemist and Druggist by G. F. Redfern, Patent Agent, 4 South Street, Finsbury, London, and at Paris and Brussels.]

Applications for Letters Patent :-

- Ammonia, &c.—No. 5369.—W. and H. Marriott, both of Huddersfield Yorkshire. An improved process and apparatus for treating nitrogeneous substances to obtain therefrom ammonia or salts of ammonia, and other products. Dated October 7, 1881.
- Ammonia.—No. 4561.—J. B. Kinnear, of Old Square, Lincoln's Inn, London. An improved process for destroying the putrescible matter of house or town sewage, separating the solid matter, an 1 for obtaining ammonia from such sewage. Dated October 19, 1881.
- Assisting Vision.—No. 4365.—P. Adie, of Pall Mall, London. Improvements in means and apparatus for assisting vision. Dated October 7, 1881.
- Bottles, &c.—No. 4516.—B. Azulay, of Barnsbury Street, Islington, London. Improvements in bottles and vessels for containing effervescing and other beverages, and in the production of the same. Dated October 17, 1881.
- Bottles -No. 4646.—C. M. Warner, of Vauxhall Walk, London. Improvements in and relating to bottles for aërated or gaseous liquids. Dated October 24, 1881.
- Bottles, &c.—No. 4716.—M. Hardeastle, of Hoxton, London. Improvements in labelled bottles and jars used by chemists, druggists, and others. Dated October 27, 1881.
- Colouring Matters.—No. 4531.—J. A. Dixon.—A communication from Doctor C. Koenig, of Hoëcbst-am-Main, Germany. Improvements in the production of colouring matters, and in the use of same for dyeing and printing. Dated October 18, 1881.
- Corking Machines.—No. 4528.—F. II. F. Engel.—A communication from Boldt & Vogel, of Hamburg. Improvements in corking machines. Dated October 17, 1881.
- Disinfecting Apparatus.—No. 4583.—T. F. Scott, of New Cross, and A. J. Campion, of Old Broad Street, Loudon. An improved apparatus for the distribution of disinfectants in pails, commodes, and like receptacles. Dated October 19, 1881.
- Drawing off Liquids.—No. 4756.—S. Pitt.—A communication from P. Hathaway, of the United States, for apparatus for drawing off aërated bottled liquids from bottles having internal stoppers. Dated October 31, 1831.
- Dyeing.—No. 4283.—J. R. Beard, of Macclesfield, and C. Faeseh, of Godley, Hyde, both in Cheshire. Improvements in dyeing with coal-tar colours. Dated October 3, 1881.
- Dyeing.—No. 4989.—R. H. C. Nevile, of Wellingore Hall, Lincolnshira Improvements in the preparation of compounds capable of being employed for the purposes of djelog and printing. Dated October 8, 1881.
- Feeding bottles.—No. 4231.—H. J. Haddan.—A communication from F. Klingspor, of Siegen, Germany. Improvements in feeding-bottles. Dated September 30, 1881.
- Filter-presses.—No. 4549.—H. E. Newton.—A communication from A. L.G. Debne, of Halle-on-the-Saal, Germany. Improvements in filter-presses. Dated October 18, 1831.
- Filter-presses.—No. 4619.—E. A. Pontifex and R. Gunning, both of Shoe Lane, Loudon. Improvements in filter-presses. Dated October 21, 188'.
- Filtering Sugar, &c.—No. 4569.—J. Roper, of New Goulson Street Loudon. Improvements in filtering or drying sugar, yeast, and other substances. Dated October 19, 1881.
- Galvanic Batteries.—No. 4309.—F. Wirth.—A communication from Dr. J. Stebbins, of New York, United States. Improvements in galvanic or electric batteries. Dated October 4, 1881.
- Hyponitric Anhydride.—No. 4514.—E. Turpin, of Paris. Improveprovements in the manufacture, treatment, and application to various purposes of byponitric anhydride, and apparatus therefor. Dated October 18, 1881.
- Lozenges, &c —No. 4282.—J. L. Collier, of Roehdale, Lancashire. Improvements in machinery or apparatus for the manufacture of lozenges and like articles of confectionary. Dated October 3, 1881
- Magnesia, &c.—No. 4281.—F. Wirth.—A communication from A. Blumentbal, of Halle-on-the-Saale, Germany. Improvements in the production of magnesia and hydrochloric acid from chloride of magnesium. Dated October 3, 1881.
- Magnesia.—4397.—T. Twynam, of Keusington, London. Improvements in the manufacture of magnesia. Dated October 10, 1881.

- Metallic Oxides, &c.-No. 4486,-J. B. Readman, of Glasgow, Improvements in obtaining the oxides and salts of certain metals. Dated October 14, 1881.
- Ozonised Oxygen.-No. 4555.-E. Hagen.-A communication from L. Q. Brin and A. Brin, both of Paris. Improvements in apparatus for the production and application of ozonised oxygen. Dated October 18, 1881.
- Pills.-No. 4717.-W. R. Lake.-A communication from J. A. Whitney, of Dobbs Ferry, New York, United States. Improvements in the manufacture of pills and similar articles, and in machinery therefor. Dated October 27, 1881.
- Recovering Nitric Acid, &c.-No. 4441.-J. Dencker, of Manchester. Improvements in the method of recovering nitric, sulphuric, and muriatic acids from the bye-products of the manufacture of uitrobeuzole or other manufactures wherein mixed acids are employed. Dated October 12, 1881.
- Rinsing Bottles, &c.-No. 4534.-J. Dolheiser, of Cologne, Germany. An apparatus for rinsing bottles and glasses. Dated October 18, 1881.
- Soda.—No. 4489.—J. Imray.—A communication from La Société Anonyme des Produits Chimiques du Sud-Ouest, of Paris. An improvement iu the treatment of liquors resulting from the production of soda by the ammonia method. Dated October 14, 1881.
- Soda.-No. 4491.-J. Imray.-A communication from La Société Anonyme des Produits Chimiques du Sud-Ouest, of Paris. Improvements in the process and apparatus for manufacturing soda by the ammonia method. Dated October 14, 1881.
- Stopping Bottles, &c.-No. 4316.-H. R. Landon, of Stoke Newington, and G. Legrand, of Islington, both in London. Improvements in and connected with stoppers for bottles, jars, and similar receptacles. Dated October 4, 1881.
- Stopping Bottles .- No. 4709 .- G. Kemp, of Swinton, Yorkshire. Improvements in stoppering bottles. Dated October 27, 1881.
- Sulphate of Lime .- No. 4702 .- J. Young, of Kelly, Renfrewshire, North Britain. Improvements in the manufacture of sulphate of lime. Dated October 27, 1881.
- Sulphuric Acid, &c .- No. 4218.- J. R. Francis .- A communication from H. Wurtz, of New York, United States. An improved process of treating mineral pyrites and sulphurets in the preparation therefrom of sulphuric acid, metals, and metallic compounds. Dated September 30, 1881.
- Testing Milk .- No. 4759 .- F. Wolff .- A communication from Burmeister and Wains Maskinog Skibsbyggeri, of Copenhagen, Denmark. Improved apparatus for testing milk. Dated October 31, 1881.
- Treating Iron.-No. 4577.-P. Jensen.-A communication from Count Ch. de Montblanc and L. Gaulard, both of Paris. Improvements in the treatment of irou for the removal therefrom of phosphorus, sulphur, and other metalloids, and in apparatus therefor. Dated October 19, 1881.

The following specifications have been recently published, and may be obtained by application to the Patent Office, Southampton Buildings, Chancery Lane, sending the necessary stamps:-

5282. G. De Laire. Preparations of vaniline. 4d.

770. A. Savage. Bottles. 4d.

781. H. J. Haddau, Extracting oxygen from atmospheric air. 6d.

862. A. M. Clark. Device for securing earks in bottles. 2d.

892. J. Arnold. Ecraseurs. 2d.

896. W. H. Atkinson. Refining camphor. 6d.

- 903, W. G. Gard and T. H. Cobley. Manufacture of tannic black. 4d,
- 914. W. Whaley. Apparatus for manufacture of mineral waters. 2d.
- 968, W. Weldon. Manufacture of chloriue, &c. 6d.
- 980. W. Weldon. Manufacture of soda. 2d.
- 991. G. F. Reifern. Galvauic batteries. 2d.
- 1002, T. Priestman, J. Longshaw, and G. Priestman. Treatment of tan liquors for manufacture of iuk, &c. 2d.
- 1004. N. Thompson. Stoppers for bottles. 2d.
- 1013. C. T. Bradbury. Dyeing. 2d.
- 1053. J. Rough and J. Hurry. Manufacture of lozenges. 6d.
- 1082. W. R. Lake. Stoppering bottles, &c. 2d.
- 1125. H. Codd. Bottles for containing aërated liquors. 6d.
- 1152. H. Codd. Instruments for opening internally stoppered bottles. 6d.
- 1161. E. Carey, H. Gaskell, jun., and F. Hurter. Purification of alkaline solutions. 4d.
- 1188. J. Mactear. Apparatus for the manufacture of alkali. 6d.
- 1192. C. Warner. Stopper for bottles. 2d.
- 1212. J. A. Dixon. Production of colouring matters from para-nitro benzaldehyde, &c. 4d.
- 1225, J. A. Dixon. Manufacture of colouring matters for dyeing and printing, and preparation of a new mono-sulpho-acid of betanapthol, &c. 4d.
- 1247, H. J. Haddan. Icc machines. 6d.

- 1253. J. Challinor. Substitute for coffce. 2d.
- 1256. G. W. von. Nawrocki. Production of colouring matters. 4d.
- 1258. S. C. Davidson. Packing bottles in cases. 6d.
- 1261. H. E. Newton. Manufacture of sulphocyanides and ferrocyanides. 10d.
- 1268. N. Thompson. Steppers and caps or covers for bottles, jars, &c. 6d.
- 1283. W. Williams. Compound or mixture for cholera, diarrhoa, &c. 4d. 1332. F. S. Barff. Compound for preserving organic substances. 2d.
- 1336. J. G. F. Richardson. Apparatus for finishing and rounding pills. 6d.
- 1351. J. Dunbar. Capsuling bottles, &c. 4d.
- 1373. O. N. Witt and H. Koechlin. Colouring matters, &c. 4d.
- 1403. J. Anderson. Substitute for coffee. 2d.
- 1424. W. G. Forster. Manufacture of acetate of soda, &c. 4d.
- 1428. C. D. Abel. Production of colouring matters. 2d.
- 1429. J. Turner. Sanitary receptacles and appliances. 8d.
- 1434. H. Barron. Disinfectant and deodorising apparatus for water-closets. 24.
- 1448. W. R. Lake. Regeneration and recovery of hydrochloric acid used in treatment of bones. 2d.
- 1483. J. Ingleby. Cocks, valves, &c., for use with acids. 6d. 1512. W. R. Lake. Manufacture of spectacles or eye-glasses. 6d.
- 2030. J. A. Dixon. Colouring matters for dyeing and printing. 4d.
- 2179, J. A. Dixon. Production of metaoxybenzaldehyde, &c. 4d.
- 2997. C. Semper. Manufacture of sulphate of alumina. 2d.
- 3137. H. J. Haddon. Lactic acid and lactates. 2d. 3278. S. Pitt. Artificial tooth crowns. 6d.

ABSTRACTS OF SPECIFICATIONS.

For permission to print the following we are indebted to the courtesy of the Engineer:-

5341. Imitation Leather, &c., G. W. von Naurocki.—December 20, 1880 .- (A communication from E. Fischer and M. E. Cohn and Wollheim.) - (Not proceeded with.) 2d.

This consists in passing a fabric to serve as a backing through baths containing chromic acid salts and baths containing leather glue mixed with glycerine, which substances are deposited on the fabric, the operation being carried on in a dark room, after which it is pressed and exposed to light, so as to render the substances insoluble.

5412. OBTAINING Fibrous Material from a Palm-tree, R. M. A. Duguid,-December 24, 1880,-(A communication from S. S. Herring.) 2d.

The leaves with their petioles of the Elais Guineensis (which grows on the oil rivers of Western Africa) are boiled in water with a little alkali, and then beaten lightly and well washed in clean water and dried. They are then passed through fluted rollers to remove the fleshy matter.

5332. Preserving Mcat, &c., J. Eckart.—December 20, 1889. 4d.

This cousists of a preserving salt consisting of 50 per cent. common salt, 47-5 per cent. of chemically-pure boracic acid, 2 per cent. tartaric acid, and 0.5 per cent. salicylic acid; 20 grammes of the salt are dissolved in 1 litre of water.

728. MANUFACTURING Magnesia, &c, C. Pieper. - February 19, 1881. -(A communication from M. Sprenger.) 4d.

This consists in the method of producing magnesia and sulphate of potassium or of sodium from sulphate of magnesium, kieserite, schoenite, or kainite, for one part, and from chloride of potassium, ehloride of sodium, or carnellite, for the other part, by mixing one or more of the substances of the first part with one or more of the substances of the second part, in such proportion that one chemical equivalent of sulphate of magnesia will be brought together with two equivalents of chloride of potassium or of sedium (or of both chlorides combined) by heating such mixture in a pulverised state to a dark red heat, and by exposing it at the same time to the action of steam.

298. Magnesia, C. Scheibler.—January 22, 1881. 4d.

This consists in the manufacture of magnesia or hydrate of magnesia from magnesiferous limestone, from magnesian limestone, or from calciferous magnesite, using a water solution of sugar or molasses.

868. PREPARATION OF Vegetable Substances for Food, H. Guiliani, -March 1, 1881. 4d.

This relates to a vegetable preparation to be used as a substitute for coffee, chocolate, or cocoa, and it consists of barley grain and carob fruit or beans. The barley is cleaned and separated by immersion in water from light and faulty grains, and then exposed to a moist heat, and afterwards roasted. The carob fruit is sim larly treated, and the two crnshed or ground and mixed.

142. MANUFACTURE OF Useful Products from Seawceds, E. C. C. Stanford,—January 12, 1881. 4d.

This relates to the treatment of seaweeds, whereby algin, algic acid, and a separated paper-making material are obtained.

1215. Treatment of Marine Vegetables. J. Imray.—March 19, 1881.—(A communication from Le Marquis A. de Saint-Yees.) 41.

This relates to the treatment of marine vegetables for the separation of their saline, cellulose, and gelatinous constituents, and it consists in washing the vegetables, them drying and placing them in closed vessels on perforated or wicker screens, where they soak in three or four times their weight of water, which, when acid treatment is employed, contains about 10 per cent. of acid, preferably hydrochloric acid. The cellulose, fibres, and woody ingredients remain on the screen with the principal portion of the gelatinons matter, the salts being mostly dissolved in the liquor, which is run off and filtered. Steam under pressure is admitted to separate the cellulose from the fibre and gelatine with an equal amount of liquor containing from 15 to 30 per cent. of sour heer, vinegar, or acetates of alkaline bases.

3137. Lactic Acid and Lactates, H. J. Haddan.—July 19, 1881.—(.1 communication from C. E. Avery.)—(Complete.) 2d.

This consists in the method of manufacturing lactic acid and lactates by the fermentation of a sngar of vegetable origin with a lactic ferment, in the presence of nitrogenous matters chiefly of vegetable origin, and of a substance suitable to gradually neutralise the acid as fast as formed.

4332. Compound for Preserving Organic Substances, F. S. Barft. —March 25, 1881. 2d.

This consists in the employment and use of the compound of boracic acid and glycenine.

1002. TREATMENT OF TAN LIQUORS FOR Manufacture of Ink, &c., T. Priestman, J. Longshaw, and G. Priestman.—March 9, 1881.—(Not proceeded with.) 2d.

The spent or partially spent tan liquor is evaporated to a snitable consistency and filtered. It is then treated with mineral acids, and the liberated volatile organic acids are distilled, and the vaponrs are condensed or collected by means of alkaline bases. The residues in the distilling apparatns, after the volatile acids are in great measure or wholly driven off, contain gallic acid, which by treatment with metallic iron is converted into ink, or the excess of mineral acid is neutralised, and ink is produced by the addition of any of the usual salts of iron.

2543. Soap, A. J. Boult.—June 11, 1881.—(A communication from C. S. Higgins.)—(Complete.) 4d.

This consists, first, in the manufacture of soap by the saponification of fats and resins, and the subsequent solidifying by stearic acid or stearine.

1204. MATERIALS FOR Beverages, R. Bull.-March 18, 1881. 2d.

This consists in the employment of rye, either alone or in conjunction with figs, or in conjunction with prepared figs and coffee.



BANKRUPTCY ANNULLED.

KEENE, EDWARD, 143 New Bond Street, chemist's manager. Made August 25, 1.81.

PARTNERSHIPS DISSOLVED.

Bruce, Davis & Co., Peel, in the Isle of Man, ebemical manufacturers.

October 15. (William Johnston Bruce, Thomas Henry Davis, and
Samuel Meadows.)

CHARLESWORTH & Co., Chester Road, Hnlme, Manchester, wholesalc druggists. October 20. (Charles Edward Charlesworth and John James Jordan.) Debts by Charlesworth.

HUNT BROTHERS & Co., Catleford, ebemical and glue manufacturers.

July 1. (William Hnnt, Edwin Hnnt, Reuben Hunt, and Frederick
Thomas Hunt.) Debts by R. and F. T. Hunt.

WALCH, WILLIAM, & Co., Bolton, manufacturing chemists. June 30. (William Wa'ch and Henry Bolton Torkington.) Debts by Torkington.

LIQUIDATIONS.

Ball, James, 201 Ashton New Road, parish Manchester, drysalter. October 24.

Graham, William Richard, 13 Rutland Terrace, Stockton, elemist and druggist (under style of "W. R. Graham & Co."), and Market Cross Chambers, Stockton, auctioneer and hanker (under style of "The Yorkshire and Cleveland Bank"). October 11.

Hall, John Thomas, 28 Church Street, Blackburn, faucy chemist and druggist, now out of business, late drysalter, 13 Back Lanc, Blackburn, October 13.

Kirkup, Thomas, 60 Elswick Road, and 4 Westmoreland Road, Newcastle, chemist and druggist. October 11.

WOOD, HENRY THOMAS GIBBONS, Boston, chemist. October 12.

COMPANIES WOUND UP-ORDERS MADE TO WIND UP.

GENERAL MINERAL WATER SUPPLY ASSOCIATION (LIMITED). October 12, by Justice Kay. On petition of Samson Baraett and Frederick Foster, mineral-water machinists, 23 Forston Street, Shepherdess Walk, Hoxton, and Hiraun Codd, hottle manufacturer, 58 King William Street. Solicitor, G. S. Hare, 2 Piuner's Court, old Broad Street.

RESOLUTION TO WIND UP VOLUNTARILY.

London and Provincial Supply Association (Limited). October 24. Liquidation. H. A. Dubois, accountant, 1a Scrjeauts' Inu, Chaucery Lane.

Personalities.

THE City Press says that the personal estate of the late Mr. Henry Isaac, of the firm of Messrs. Isaac, Druff & Co., opticians, 63 Hatton Garden, has been proved over 11,000%.

MAYORS.—The following newly-elected mayors belong to our craft:—Mr. John Horsley, J.P., re-elected at Hartlepool; Mr. James Norton McNeil, Crewe; and Mr. Edward H. Handford, Torrington.

THE will (dated July 16, 1881) of Mr. Isaiah Bourdas, late of Pont Street, Belgrave Square, who died on Sept. 16 last, was proved on the 19th ultimo by Isaiah Bourdas, the son, the sole executor, the personal estate exceeding 40,000l. The testator leaves 2,000l. and several leasehold houses upon trust for his daughter, Mrs. Elizabeth Thurston; and there is a similar bequest upon trust for his daughter, Mrs. Frances Catherine Thurston. All his real estate and the residue or the personalty he gives to his said son.

A COMPLIMENTARY SOIRÉE was given by the employés in the firm of Messrs. Burgoyne, Burbidges, Cyriax & Farries, on October 28, at the Masons' Hall, Coleman Street, to Mr. Charles W. White, who had lately returned from a business tour round the world in the interests of the house. Mr. Cyriax was in the chair, and, with the musical talent which pervades the establishment, aided by Mr. A. Zimmermann and a few ladies, a very pleasing programme was arranged. In the course of the evening Mr. White gave a description of his tour through India.

Obituary.

Ponsford.—Mr. J. Ponsford, chemist and druggist, Newton Abbot, aged 67 years. He was buried on October 21st, in Wolborough churchyard.

Holman.—On October 25, at Pennycomequick, Mr. John Holman, aged 79 years. Mr. Holman formerly carried on the business of chemist and druggist at 1 George Street, Plymouth, now occupied by Mr. J. Allen. He retired about 20 years ago. He died suddenly on the night of October 25, from the rupture of a blood vessel of the brain. An inquest was necessarily held.

DEATH OF PROFESSOR JOHN POSTGATE.—Professor John Postgate, of Birmingham, who died lately, was the originator of the agitation which resulted in the laws for the prevention of the adulteration of food and drugs. Professor Postgate was a native of Scarborough, where he worked as a boy in a grocer's shop, and his disgust at the adulteration daily conducted before his eyes led him to take up the question in after life. He settled in Birmingham in 1851, and three years later induced one of its Parliamentary representatives to bring under the notice of Parliament the terrible evils of adulteration, and the remedies in the public analysis of commodities which have since been adopted. The recommendations of the Select Committee appointed on the question were framed on Professor Postgate's scheme; but it was not until after twenty-five years' constant agitation, during which time he ruined his practice, that the Professor saw the Adulteration Act passed. Deceased was F.R.C.S., England.

Bechange Column.

Advertisers in the Exchange Column will find it very much to their advantage to draw up their announcements so that they will fall naturally into one of the divisious into which the advertisements are grouped.

We would also suggest that those who avail themselves of the Disposal section will be wise to define, with some approach to detail, what they have to sell. Probable purchasers are too busy, in most cases, to enter into preliminary correspondence, which is likely enough to have no ultimate result.

TERMS.—Announcements are inserted in this column at the rate of one halfpenny per word, or condition that name and address are added. Name and address to be paid for. Price in figures counts as one word.

If name and address are not included, one penny per word must be paid. A number will then he attached to the advertisement by the Publisher of THE CHEMIST AND DRUGGIST, and all correspondence relating to it must he addressed to the "Publisher of THE CHEMIST AND DRUGGIST, Colonial Buildings, Cannon Street, London, E.C.," the envelope to be endorsed also with the number. The Publisher will transmit the correspondence to the advertiser, and with that his share in the transaction will cease.

Deposit of Money.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exebange Column may remit the amount to us. We shall acknowledge receipt to both parties by post-eards, and shall only pay it away on the advice of the remitter. Wbether returned to him or paid to the seller, we shall charge a commission of 2½ per cent, on any money thus passing through our hands, and not less than 6d. on any single transaction.

FOR DISPOSAL.

Dental and Surgical.

Small portable new dental-lathe on stand, 10 inches square; cbcap, or exchange. 13. Fore Street, St. Austell.

Splendid field amputating - case; set toothforceps; scaling and stopping pocket and minor operating cases. List sent. "Facies," 5 Camden Villas, Shirland Road, London.

Drugs and Chemicals.

Rad. glycyrrh. ang. recens. For price and sample apply, Bratley, Chemist, Pontefract. What offers for a few cwt. of rass. guaiaci?

John Sneed, Chemist, Keighley.

1,200 new poppies, very cheap, samples free. Gilliatt, Chemist, Bostou.

1 cwt. crude glycerine, 65s.; large quantity oak hark, 80s. per ton. H., 51 Long Street, Middleton, Lancashire.

4 oz. virgin otto, 2 cz. ol. patchouli, 3 oz. ol. geranii gal.; all finest quality; 15 off list, or offers; sell any quantity. Greig, 591 Old Kent Road, S.E.

A quantity of surplus stock to be sold cheap.— Saffron, wax, soy, essence lemon, super ol. menth. pip. (L.B.), acid carbolic, acetic, alum, senna; ex-ra hard carriage candles only 9s. 6d. per dozen, transparent 8s.; send for price-l'st. R. Sowerby, Middlesborough.

For Cash.—3 bottles Hotchkiss's oil of peppermint, at 14s. 3d. per lb.; about 3 cwt. gum Turkey, sorts, 6d. per lb.; 2 cwt. orange shellac, 1s. 2½d. per lb. (in 28 and 56 lb. hags); finest Messina ess. lemon, 8s. 6d. per lb.; finest cod-liver oil (in 5 gallon lots), 6s. 6d. per gallon; 4 boxes of cutch, 33s. per cwt.; 1 ton green copperas (in 5 cwt. casks), 4s. per cwt.; Australian honey for oxymel scillæ, makes a splendid article, 6d. per lb. S. B. Hicks, Chemist, Hornsey Rise.

20 lbs, genuine white wax, 1s. 9d. per lb.; sample sent. E. Seott, Chemist, Broad Lane Sheffield.

Proprietary Articles.

2½ d z. Cooper's test-pellets, 5 doz. and 11 Wilkinson's magic drops, 4s. 61. Offers wanted in casb, or exchange. 74/11.

Myer's cattle spice, purehased January, 1881. Cash offers requested for large or small

quantities. 74/39.

Ecabrry & Johnson's Plasters—12 capsicum, 2s.; 11 belladoma, 2s.; 12 6d. mustard, 1s. 9d.; 12 1s. ditto, 3s. 6d.; 12 Benson's capcine, 4s.; 15 yard roll porous strengthening, 4s.; 12 Jenner's 2s. 6d. liver mixture, 15s.; 12 Epps' 1s. 1½d. pulveur, 6s.; 6 Epps' 1s. 1½d. rheumatin, 3s.; 2 2s. 9d. ditto, 2s. 6d.; 12 Epps' 1s. 1½d. rheumatin opodeldoe, 6s.; 12s. 9d. ditto, 1s. 3d. Offers for all or part, Fuller, Chemist, Norwich.

Dr. V. Baud's diastatised irou tonic, 2s. 9d. Hopper's black current elixir, 131d.; McMaster's hair restorer, 3s.; liquid anatto, 6d. and Is.; Dr. Hall's oblorate of potassa, 2s. 9d., 4s. 6d., and 11s.; Pyne's Devonshire oils, 2s. 6d.; Ferris' wice of beef and iron. 4s. 6d.; Battle's anti-rheumatic mixture, 13½d. and 2s 9d.; Vint's tonic antibilious pills, 71d. an 1131d.; Kimmond's "Duplex" magnesia, 2s.; Kinmond's magnesilyne, 1s.; Woodcock's infants' mixture, 131d.; Giffey's milk food, Is. 9.1.; Lelger's disinfecting fluid, 6d. and 1s.; dentocrete, 2s. 61.; Vicat's insectide, 1s.; Hooper's Liebig's food, 5s.; Rumsey's platepowder, 1s.; Pickering's teething powder, 13½d.; Thompson's Cheltenham salts, 2s. 6d.; Morison's rheumatic liniment, Fox's palatable easter oil, cod-liver oil, and col liver oil with quinine, cod-liver oil capsules for pigeous, Pickering furniture polish; ½-oz. 1-oz., 2-oz., 3-cz. covered pots, from 6d. to 1'd. per dozen; Preston ex. bitter almonds, 1s.; French pomade, zouave, in stoppered bottles, 1s.; 3j. measures, 6d.; Gerrum fleating lights, 6d.; Dowset digestive candy, $13\frac{1}{2}d$. and 2s. 9d.; currie powder, 1-lb. tins, with about 300 other patents and sundries; all at half retail prices; a list sent. W. R. Stevens, Chemist, Woodberry Town, N.

Apparatus.

A large tincture-press. Apply, J. M. Wilson, 16 Leven Street, Elinburgh.

Asbestos gas-stove, suit sbop or room; cost 21. 18s., take 11. 15s.; quite new. C. Malone, 59 Camberwell New Road.

Cans, clean and sound, varions sizes, cheap. Particulars, apply, H., 70 Moniers Road, Old Ford, London.

Wightman's printing press, with three founts type, roller, stick, lines, &c.; cost 51., will take 41. Harvey, Margate.

Lanterns and lime light apparatus, complete solar lamps, gas-bag, pressure-board, sheet, &e.; a bargain. Doble, Tavistock.

Lever copying press, new, price 10s. 6d., less than half cost. "Pharmacy," 69 Spring Garden's, Brixton.

Albion printing press, nearly new, size of hed 9 inches by 12 inches, list price 12t., will take 8t, or exchange for drugs, &c. Sneath, Chemist. Newark.

A 1 horse vertical steam holler, also two copperjacket pans, 20 gals, and 6 gals., all in excellent condition. B. Robinson, Chemist, Manchester.

One of Hancock's mixing and grinding machines, will mix 30 or 40 lbs. at a time; been very little used. What offers? John Hall, Gatchouse, N.B. Very strong second-hand tank for sale, a bargain,
4 ft. square, covered, holds 400 gals., last a
lifetime, for any purpose. J. Blomfield, St.
Bottliph's, Colchester.

Hand hoist, elain, brake, complete, new; solid copper wine and spirit merchants' pump, brass valves, tinned inside, nearly new; Gaiffe's coll, half-ineh spark, new, never been used, will exchange for druggists' shop-drawers (12 ft. wanted), good condition, or cash offers. Gray, Chapel-en-lz-Frith.

Educational

Offers wanted for Southall's materia medica box of specimens, quite perfect and nearly new. 83/20.

Herbarium of 600 British plants, all mounted, named, and arranged in a cabinet. D. H., 9 Parade, Goldhawk Road, W.

Suitable Christmas box.—The indigenous, officinal, and other plants, beautifully mounted, classed, and named, only 7s. 6d. Higginson, Newferry, Birkenhead.

Set of illegible autograph prescriptions (original), 2s. 6d.; 39 prescriptions (catch and difficult) given to dispense at Minor during past 12 months, 2s.; 50 questions asked of successful stadents at last Minor, 1s. 1d.; lot of cheap, almost new, books, stamp for list Saunders, 79 Gaisford Street, N.W.

Literature.

Offers wanted for Chemist and Druggist for 1878, 1879, 1880. Brooks, Wbitby.

Pharmaceu ic il Journal, third series, complete; almost anything accepted. 63/7.

Pharmaceutical Journal, posted on Monday; offers wanted. Jenner, Chemist, Bury St. Edmunds.

Smith's "Pharmaceutical Guide," 2s. 6d.; Pharmaceutical Journal, 1879, 1880, 5s. M. Smith, 70 Mill Street, Aberdare.

Fifty-two odd monthly parts Pharmaceutical Journal, 1842 to 1859; 5s, herbarium. What offers? Bowers, 11 Wolseley Terrace, Mutley. Plymouth.

Ch-mist and Druggist from Juue, 1873, to December, 1878; Pharmaceutical Journal from January, 1869, to December, 1878, complete, unbound; offers wanted. Griffith, Vronheulog, Bangor.

Tanner's "Practice of Medicine," 18s.; Arnott's
"Elements of Physics," 10s. 6d.; Pharmaceutical Journal from 1875, 3s., single vols.
4s.; Chemit and Druggist from 1875; "Year-hook of Pharmacy," 1874, 1875, 1878, 1877. What offers? Jones, Pharmaceutist, Treherbert.

Deceased Chemist's Library.—Fowne's "Chemistry," Paris' "Pbarmacologia," Babington's "Manual British Botany," Garrod's "Materia Medica," four volumes Pharmaceutical Journal, and nine others for 30s.; also materia medica cabinet, 200 good specialens, 15s., or the whole for 40s. Juvenis, 8 Strand, Torquay.

"Year-book of Pharmacy," 6 vols., 1870, 1871, 1872, 18 3, 1874, 1875; Fowne's "Manual of Chemistry," 1854; Parke's "Chemistry," 1837; Squire's "Companion to the British Pbarmacopœia, 6th edition, 1867; Burgess' "Manual Diseases of the Skin," 1842; "Manual of Surgery," 1829; Dr. Meadow's "The Prescriber's Companion," 1864; "Translation of the Pbarmacopæia

"Translation of the Pharmacopoeta Londiensis," 1851; Beasley's "Pocket Formulary," 1866. Two gnineas for the whole. 15/15.

Soda-water Plant.

American-principle soda-water machine, good as new, second hand, 300 dozen per day, recipes, instructions; for cash. Particulars, N. G. Wilcocks, Bath. 301. soda-water machine, Bramah's, 400 dozen daily, complete, with two racks, to be seen at work by appointment, recipes and instructions included, particulars and warranty given; second-band. N. G. Wilcocks, Bath.

Shop Fittings.

Statuette, "You Dirty Boy"; what offers? In perfect order. Harvey, Chemist, Margate.

Cheap.— Four 2-gallon pear-shaped show-hottles.
Hammond, Chemist, Hull.

Sbow-jars and carboys, hottles, pots, &c. State particulars, R. F. Brown, Chemist, Coekermouth.

The entire fixtures of 5 handsome elemists' shops for disposal, great bargaius. Lloyd Rayner, 333 Kingsland Road, London, N.

Pear's statuette "You Dirty Boy," original price six guineas; will take half; cash only. Walter Stead, Chemist, Westgate, Heckmonwike, Yorks.

Leath & Ross' homeopathic medicine case, nearly complete, cost 41, 4s., to be sold cheap, nearly new, and in good condition. Thomas Kenny, Chemist, Beyerley Road, Hull.

At any reasonable price, a quantity of showbottles, specie-jars, and every requisite for a chemist; must be sold, room wanted. 846 Old Kent Road.

Wircow-carboys, leach-jars, filter (cost 14s.), two 18-pill machines for 3 and 5 grain pills, feeding bottles; patents, various, list free; no offer refused. T. E. Pearce, West Street, Tavistock.

Four 1½ gallon stoppered window-globes, at 3s. 6d. each; two dozen 1 gallon labelled wide mouth black upright bottles, with japanned caps, at 1s. 8d. each. Wylde, Chemist. Macclesfield.

4 ft. long, 6 ft. long, flat mahogany plate-glass eounter-cases, as 97 Maw's; 1 ft. 4 long, 2 ft. 1 long, 2 ft. 4 long, 2 ft. 6 long, 4 ft. long, 9 ft. 6 long mahogany hent plate-glass counter-cases; 4 ft. 8 long, 5 ft. 2 long, 5 ft. 10 long, mahogany plate-glass showcases, as 76 Maw's; two 5 ft. long plateglass show-eases on stands, as 120 Maw's; 3 ft. long, 3 ft. 6 long, 4 ft. long, 4 ft. 6 long, 5 ft. long, 6 ft. long, 7 ft. long, 8 ft. long, handsome dispensing-ease screeus, as figs, 40, 163, 164 Maw's; 6 ft. long, 7 ft. long, handsome dispensing-screens with plate-glass case at each eud and mirror centre; 10 npright cases with and without desks, 2 ft. long, 2 ft. 6 long, 3 ft. long, as figs. 37, 38 Maw's; 3 ft. 6 long mahogany desk with ground plate-glass screen in front and end, similar to 79 Maw's; sponge-cases, as 90, 92 Maw's; soda-water stand, as 63 Maw's; cigar-cases, as fig. 53A Maw's. Lloyd Rayner, 333 Kingsland Road, London, N.

50 nests mabogany-fronted shop drawers, with glass and gold labels, with lockers under, shelving and cornice complete; 10 nests deal - stained mahogany - fronted shop drawers; 20 mahogany-top connters, all lengths; 2 mahogany counters, with glasscase fronts; 4 deal-top counters; 14 mahogany wall-eases, all sizes; 5 mahogany window enclosures; quantity second hand gold-labelled shop bottles; oil-bottles, with glass caps; ½ gall. glass percolator; ointment and ext. jars; store bottles and boxes; composition, iron, marble, glass mortars and pestles, all sizes; tinctnre-presses; umbrella-stands; 5 outside shop lamps and brackets; counter and dispensing scales; glass, pewter, copper measures; glass, com. position funnels; quantity window showcarhoys and sp cie jars; handsome showjars, as fig. D Maw's; jujube-jars, and every description of fixtures and utessils require 1 by the trade. Lloyd Rayner, 333 Kingsland Road, London, N.

A maho gany dispensing-counter, 11 feet 6 long, 2 feet 6 wide, with handsome polished mahogany screen front, fitted with drawers; desk, with brass bookshelf; water-cistern, with tap. Apply, G. Waugh & Co., 177 Regent Street, W.

Handsome 18-inch lamp, glazed, clear glass, and fitted with three hottle-lenses, also ornamental 4-foot cast-iron bracket, as fig. 6 Maw's eatalogue, in good condition, almost new, price only 41.10s. Address, J. Garrett, Chemist, Brighton.

Shares.

11. shares in Chemists' Aërated Water Association. For price write to Thomas Charles Taylor, Chemist, Nottingbam, enclosing a stamp for reply.

Formulæ.

Face-powder, unsurpassed, and cheaply made, formula 13 stamps. Facies, 5 Camden Villas, Shirland Road, London, W.

Glossy pearl coating, very successful, 13d.; liq. cochineal, very good, 2s.; marking ink, without preparation, 2s. 6d.; condition powders, 1s. 6d. Apply to Evans, Boundary House, Barnet.

Profitable and reliable formulæ.—Sole reason for offeriog, no demand for such articles. Bandoline, glycerine jelly, rat poison, liquid glue, hair germinative, gleet drops, chlorodyne, corn eradicator, taraxaeum cocoa, egg-producing powder, 2s. 6d. each, or five for 10s. Address, Chemist, Mr. Bell, 33 Stafford Street Longton, Staffs.

33 Stafford Street, Longton, Staffs. "Chilblain Remedies," for broken and unbroken, almost instant ease; "Cough Syrup" (resembles Kay's), most invaluable, cures quickly, inexpensive; "Essence for Deafness," simple and effective; "Glycerine and Almond Jellies," three colours, attractive appearance, firm and saleable; "Mist. Gonorrbœa" (eapivi), nauseous taste covered, inseparable and most reliable; "Curative Pastilles" (cubebs, &c.), highly recommended when mixtures are objectionable; "Cryptzymosis," infallible injection for gleet, &c., quickly eures long standing cases; "Campholyde," external specific for neuralgic pains; "Cold Cream," snowwhite, inexpensive and elegant; "Amygdaline Balm," for chapped hands, &c., superior to and quarter price of glycerine; "Lime Cream and Glycerine," creamy, snow-white, never separates nor turns rancid, from 2s. 6d. gallon; "Entirely New Remedy for Toothache," gives instant care, nou-poisonous; "Nigerine," jetblack, waterproof patent blacking, quarter price of Nubian, containing oil, improves the leather; "Rheumatic Embrocation," best remedy in existence for rheumatic and other pains, costs about 7d. lb.; "Bengal Cbutney," delicious, appetising, admixture of fruits and spiees, 4d, lb.; "Digestive Relisb," best and cheapest sauce in creation, universally liked; "Quinine and Iron Tonic," splendid preparation, bright and unchangeable; "Worm Syrup," purely vegetable, pleasant tasting and effective; "Stomach Corrector" (Dr. Taylor's) most invaluable mixture, always to be relied on. "Occasional Pills," (for ladies), preferred by many to Welch's or other female pills, keep well; "Lavender Water," equals Sainsbury's in aroma and durability of fragrance. Above are guranteed genuine, as 160 letters will testify. Money returned if not app. oved of. Recipes 1s. 1d. each, three for 2s. 6d., post free, with full directions for making, doses, uses, &c. Brooks, Chemist, Louth, Lincolnshire. N.B .- Dctailed list of 8' post

My formula for perfume, which lately obtained the premium, "having upwards of 170 competitors," I will forward on receipt of stamped addressed envelope and 18 stamps.

—Testimonial received from Chemist, South Coast. "Your premium perfume gives entire satisfaction, figuring conspicuously in leading daily sa'es. The magnitude of last month's make almost indrees me to call it my 'October brew." Address, E. Evans, 12 Derwent Villas, Champion Hill, S.E.

Fragrant foaming dentifrice (like "Floriline"); marking ink, sine silver (aniline), writing executed defies chemicals; effervescing fruit saline (resembles Eno's); magic neuralgic drops (never-failing renedy); quinine and iron tonic (resembles Pepper's); limejuice and glyccrine (inseparable, white as milk); blue-black ink (non-corrosive, sine iron or galls); cherry tooth paste (uever ferments, like Gornel's); brilliantine (inscparable, like Rimmel's); pill-coating, (pearly white, no mucilage or mastic used); glycerine jelly (perfectly transparent); erimson marking ink; hair restorer (colourless, no deposit, sine silver); aromatic vinegar; toilet vinegar (as Rimmel's); platepowder (like Stevens' "Silicon"); Oleum Flavum Conc., for pomades (colour stable); soluble essence ginger (like Hay's); corn solvent, clear (not acid); liquor eopaibæ comp. c. buchu et matico (mixes elear with water); gonorrhoea paste, excellent (Dr. Ricord's); taraxacum and podoc phyllin (resembl s Pepper's); with many others; send stamp for list, stating wants. Chemical analyses for the trade. The toilet preparations are identical with those prepared by a wholesale West-end firm; others equally good; all inexpensive to make; 5s. each (five for 1l.). Readers are cautioned against cheap and worthless imitations. I was first to advertise formulæ in this journal. Note address, "Analyst," care of Mr. Warnes, 79 Gaisford Street, N.W.

Miscellaneous.

A really well-made Cremona violin, S'raduarius copy, tich mellow tone, fine playing order, case and bow, only 30s. Approval John Riley, 2 Cross Lane, Salford, Manchester.

Small stock of chest-protectors (single, double, and hair-skin), and respirators, in good condition, cost 35s.; will take 25s. Tritton, 23 Horton Street, Osmaston Road, Derby.

Dozen Brandreth's pills, stamped, no outside wrapper, clean, 5s. per doz.; some very fine engravings, water colours, and oil paintings, cheap; 4 oz. quiniæ salieylas, 11s. per oz. Woodend, 22 Pitt Street, Liverpool.

Mahogany folding bagatelle board, 7 feet by 1 foot 9 inches; all accessories; good condition; 21 cash; cost nearly double. Walter Stead, Chemist, Westgate, Heckmonlwike Yorks.

Homosopathic family medicine-case, fitted with 45 1½-drashm bottles, 25 filled with tinctures, 12s. 6.l., retailed at 25s.; Laurie's "Homosopathic Domestic Medicine," 24th edition, new, 10s.; published 16s. Forth, Chemist, Ashford, Kent.

Pill machine, cuts 21 5-grain pills; Squire's "Companion," ninth edition; Savory's datura tatula and cigarettes; two pearshaped show carboys, 33 inches high, 57 round, and 32 high, 45 round; very cheap. 82/4.

Female glass syringes, 2 oz., with other sizes; Crawshaw's 6d. dyes; Reckitt's blue, also black lead; Captain White's Oriental pickles, with others; Vin-Santé; flesh gloves, various; combs, all sorts; many chemits' sun'iries; drugs, oil, petroleum. Offers. E. J. Owles, 97 Fore Street, Ipswic',

- A few ounces of ol. lavand. Mitcham, in exchange for dental instruments, or 8s. oz. cash; ½-gallou York Glass Company's percolator, 15s.; bent-glass show-case, mirror on back, 13 by 22 feet, 15s. Roots, 24 Strood, Rochester.
- Gun, very superior 12 gauge, central-fire, double-barrel, choke-bored, breechloader, perfect conditiou, grand killer, and all recent improvements, 61.5s.; new solid leather case for ditto, 11.7s.61.; complete set of cartridge, loading, re-capping, and cleaning implements, 11.; together or separate. Address, G., 331 Lodge Road, Birmingham.
- Glycerine (fiuest) 1 cwt. 1s. 2d. lb., 21 lbs. demy six reams, 7s. 6d. per ream; Wilhelmsquelle, 50 large, 13s., 10s.; Savory's food, 5s.; check and alpaca sponge-bags, 7s. per dozen, eight sizes assorted; two large japanned tin canisters, capital for pulv. lini, &c., 8s. 6d. each, hold about 1½ cwt.; ½ oz. ¾ oz. covered pots, 8d. and 9d. per doz.; 8 blue syrups, gold labels, pints; 6 3-lb. blue ointmentiars; cash with order. Day & Co., Herue Hill, S.E.
- Upright mahogany show-case, 4 ft. 6 by 2 ft. high, three compartments, glazed doors, inside fitted with plate-glass shelves, movable, return end, semicircular glazed front, inside fitted with plate-glass shelf, 23 in. long, 6 wide, 5 gulneas, good condition; Halse's galvanic machine, 12 batteries, nearly new; capital ½-gallon iron tincture-press, tiu-lined, 12s. 64.; elect-oplate suppository mould; six tooth key instrument, with extra claws; ten pairs forceps, 32s.; colliver oil, best quality, in Winchester quarts, quantities to suit purcha-ers, 6s. 64. gallon; 7 lbs. Barbados aloes, good, 1s. 6d. lb. Moore, Chemist, Cheltenham.

WANTED.

4-oz. soap-mould. 77/17.

- Large-size gazogene. Day & Co, Herne Hill, S.E.
- American turps, cheap. R. Sowerby, Middlesborough.
- Beasley's "Book of Prescriptions," late edition. Hargreaves & Son, Prestou.
 "Veterinary Pharm acopæia," in good condition.
- Price to Blade, Wombwell.
- Halse's galvanic apparatus. State condition and price. 83/9.
- Cup moss; state quantity and price. Harvey, Margate.
- Register, chemists and druggists, any year, exchange Wilson's "Anatomy," or cash. Garduer, Asylumn, Yarmouth.
- Chemist and Druggist monthly, also Beasley's "Formulary." Price to Sykes, Great Barr Street, Birmingham.
- Drugs, sundries, tooth instruments, mahogany drawers, dispensing and stock bottles, &c. 83/16.
- Chemist and Druggist, 1876, January to Juna inclusive, clean. Lowest price to "Pharmacy," 60 Spring Gardens, Buxton.
- A small Pindar's or Cocking's pill-machine, with piping press; also a mixer, cabable of holding 1 lb. of Gregory's powder. Apply to R. Madgshon, Chemist, Jarrow.
- Lowest price for Howard's quinine in sealed 4 oz. bottles; Siegel's syrup, 2s. 6d. and 4s. 6d.; Alleock's plaister; Powell's balsam. 81/20.
- Balkwell's "Mechanical Dentistry," Taft's "Operatic Deutistry," Tomes' "Dentul Auatomy." Deus, 149 High Street, West Bromwich.

- Garetson's "Oral Surgery," Tomes' "Dental Anatomy," and Stocken's "Materia Medica"; also for sale, cheap, Tomes' "Dental Surgery." Address, Thos. Loten, Dentist, Hornsea, Yorks.
- Garrod's "Materia Medica, B.P.," McNab's "Botany," "Selecta è Prescriptis," and Lescher's "Elements Pharmacy"; must be latest edițions and perfect. A. H., 93 Marston Road, Stafford.
- Mahogany-fronted gold-labelled uests of drawers, about 18 feet by 2½, in good condition; also n.·m. and w.·m. shop-rounds, gold-labelled and good condition, and weight, viz., 4, 10 or 12, 20, 30, 40, oz. 83/6.
- Shop fittings, counters, drawers, glass cases, &c.; shop bottles, pots, &c.; als) window show bottles, and everything required in a druggist's shop; also three oil-eisterns, to go in a recess 6 feet 6 inches. Particulars to John Hall, Gatehouse, N.B.

ADDRESSES AND INFORMA-TION WANTED.

Important!—Address wanted of John A. Macpherson, Druggist's Assistant, lately with Mr. John Macdonald, Pharmaceutical Chemist, Edinburgh; left there about a month ago, supposed to be in London. A. D. Guthrie, Chemist, Bonniugton, Edinburgh.

Mr. J. M. Proctor (Nottingham) writes:—"I answered au advertisement about a lamp last month, and got a good copper lamp for the price of an old tin one. I am satisfied with the Exchange Column, whatever some folks may think about it."

NOTES FROM GREECE.

BY DR. XAVIER LANDERER.

On the Fruit of Cactus Opuntia.—In Krete and Cyprus the gardens and vineyards are often hedged with the Cactus Opuntia. To make a hedge of this it is only needful to stick a leaf in the ground and draw the earth round it.

The plant is called "Frankosykia," that is, the "fig from Frank-land," and the fruit is called "Frankosyka," or "Frankish figs." They are full of a wonderfully sour thirst-quenching juice, which is used for colouring red rosogli and other confectionery. The skin, with the minute prickles on it, must be removed before the fruit is eaten. When several fruits are eaten daily for some time, the urine becomes tinged blood-red, and the fruit is therefore much used as a diuretic. The Kretans and Cypriotes also manufacture vinegar and spirit from it.

A Food Prepared from Apricots.—The apricot, called "Kaissia" in Turkish, grows as a small forest tree in Cyprus, near Damascus, and elsewhere. From the fruit a pulp is prepared, which is spread on slabs of stone and boards and dried in the sun. The layers of dried pulp are then rolled up, and look just like rolls of thick brown cloth. When wanted, the housewife cuts a piece off with her scissors and boils it. These pieces, called "Kaissopyta," are given to the children and servants instead of any other fruit. For some years the cultivation of apricot trees has been extending rapidly in the Greek islands, and kaissopyta produced in Andros and Tinos has already reached the market.

On the Cultivation of the Hashcesh Plant in Greece.—As the cause of many accidents, murders and suicides, and of innumerable brawls and quarrels among the Chassis Theria-

kliden, the Egyptian Government has forbidden, under draconic laws, the growth of the homp plant and the manufacture and sale of its preparations. This prohibition has recalled the fact that the *Cannabis indica* flourishes in Greece and its cultivation has been commenced in Beeotia, whence it is exported to Egypt and used in the preparation of lasheesh.

The name "assassin" is derived from hashesh, the original assassins being accustomed to inflame their courage by intoxicating themselves with the drug. When the Egyptian Government learns about this trade it will doubtless be stopped by the Custom-house officials.

Ailanthus Glandulosa as a Vermifuge.—The ailanthus is a beautiful ornamental tree, which is found in all gardens and avenues in the Levant, although it is not evergreen, and its flowers have a disagreeable odour. The tree comes from the Moluccas, and its name is from a Moluccan word, "Ailanth," meaning "tree of heaven," so applied because the topmost branches seem to be lost in heaven. In the Levant the costly European hunting-dogs suffer much from worms; they are reduced to skeletons and even killed by the plagues. The bark of the ailanthus is used as a remedy, as well as kusso, and is a good vermifuge.

In the East the great enemies of the forest arc forest fires, herds of goats, and baker's ovens. Goats will eat all kinds of saplings except those of the ailanthus, so that this species offers the best means of preserving the verdant covering of the Greek mountains.

Chian Turpentine.—Dr. Landerer assures us repeatedly that the Greeks are such shameless adulterators that it is useless to expect to get pure Chian turpentine now that the price has made it worth adulterating. He mentions the following example of their recklessness:—

Adulteration of Wax.—Wax is exported to Trieste, Venice, and other places, in barrels, which are filled with melted wax and allowed to cool. One buyer found embedded in the wax gourds filled with water. The method now employed to detect this adulteration is to pierce the mass of wax with a hot iron, which liberates the water and allows it to collect on the top of the barrel.



THE Board of Trade returns for October show a material increase both in imports and increase both in imports and exports. The total imports for the month amount to 31,307,313L, or close on 4,000,000L more than in October, 1880. Exports show an improved trade nearly all round, candles and sugar only exhibiting unfavourable figures. The total value for the month was 21,224,084l.; in October, 1880, the value was 18,685,060l. The figures for the chemical trades show a very satisfactory business:—

Oct. 1880 .. cwt. 586,943 Oct. 1881 Alkali .. 629,651Alkali ... Other chemicals ..value £194,493 ..value £226,477 .. £201,581 £241,527

The alkali trade remains in much the same position which The consumption is, it has held throughout the year. perhaps, larger than it has ever heen before, but the facilities of manufacturers have outrun demand, and the consequence is that profitable prices cannot be realised. Soda crystals have not maintained the advance acquired last month, and are now dull. Bicarbonatc unchanged. Ash is a fraction lower, but caustic is firm at quoted price. Bleaching powder is rather dull of sale at unchanged

Oxalic acid has been in strong demand throughout the month, and has advanced fraction by fraction to 25 per cent. hetter than this time last month. At present quotations it is difficult to obtain, and the manufacturer will not book forward except at an advance. The low prices which have so long prevailed for this acid have tired out all the manufacturers but one, and now that stock in second hands is ahout exhausted, this one is likely to reap the reward of his patience. A stronger demand and speculative purchases have also coincided to help forward the price.

Citric is firmer, for though transactions have been effected at 2s., makers ask 2s. 1d. for forward contracts. Tartaric has also been in good demand, and prices have fractionally advanced.

Sulphate of copper is steady at a further slight advance. Sulphate of ammonia has sold rather higher, and carbonate, though unchanged, is active. Borax in good demand at previous prices.

Iodine seems a shade weaker, and makers of iodide of

potassium have reduced their quotations.

As we anticipated, the quotation for Howard's quinine has been further reduced, showing a fall of 1s. on the month. English is now 8s., French 8s. 6d., and German 7s., the latter showing no variation. The stock of bark is now so large, with prospects of an increased rather than a diminished supply as time goes on, that quinine makers can take their pick of the market at constantly declining prices. largest transactions are in Cuprea bark, principally at 1s. 6d. to 1s. 8d. Further large arrivals of this bark are expected in London. The official return of the stock of "medicinal" bark in London on October 31 shows 45,720 packages this year, 25,763 in 1880, and 19,341 in 1879. In 1875-6 (from October 1 to September 30) Ceylon exported 16,842 lbs. In the same period 1880-1, the exports from that island were 1,207,720 lbs. This latter quantity is very nearly the same as that of the previous season, hut Messrs. James Cook & Co., in their circular of October 27, state that "in another two years the exports promise to be far more important."
Quicksilver is 2s. 6d. to 5s. per bottle higher, which causes

an advance of 1d. per lb. for the preparations. Some unexpected movemen's have occurred in this article during the month. First the consignees made the price 71. per hottle; then when second holders were doing a comfortable trade at 135s., Messrs. Rothschild sucdenly dropped their price to

130s., at which it now stands.

Cape aloes at last sales went at easier prices than lately. Canada balsam and halsam of tolu are both reported scarce, and a c nsiderable advance has been made by holders. Balsam of capivi is still in insufficient supply, and prices are again stronger than a month ago. Higher prices are again paid for curebs, and any of first-rate quality would just now hring even higher rates than the latest quoted. Camphor is again selling rather vigorously, with a prespect on the faith

of reports from China that much higher figures will be obtained. Castor oil is rather firmer, but cod-liver has again turned in favour of buyers. Almond oil, both expressed and essential, has advanced. Opium is now dull on the London market. Ipecacuanha has sold at a decline of 3d. to 6d. Jalap is rather scarce. Some Jamaica-grown sold at last sales at 8d., which is considerably below the value of the best Mexican. Tinn velly senna is commanding rather hetter prices at the sales, and senega and snake roots are both dearer.

Among other prices made at late drug auctions may he quoted good red capsicums bought in at 30s. to 40s., the latter being free from stalks; pale New Zealand honey bought in at 54s., and Chilian, 58s. to 65s. Jaborandi leaves, 7d., and rose leaves, 1s. 3d. Matico, good, fair, sold at 1s. 2d. Irish moss bought in 13s. to 22s. Malta orange peel hought in at 5d. to 9d., dull ribbon hand cut to very narrow strips machine cut. Alkanet root sold at 30s. Malta aniseeds bought in at 36s.; Syrian, 32s.; Russian, 22s. to 25s.; Italian, 35s.; and star, 70s. to 75s.

Respecting Opium, Messrs. Barry & Co. write as follows on November 2, 1881:-

Our market during the month of October followed the lines which we anticipated in our last report. At the beginning the strong demand ruling for America and Holland maintained the price of Carahissar at 118 piastres, and in the first two weeks sales of 250 cases were concluded. In the middle of the month huyers were indisposed to go on at preceding figures, and holders had to facilitate business by some concessions up to the 20th, when 130 cases were sold at 115ps. Bogaditch and Yerli, however, have not been similarly affected, as these kinds are not abundant on the market.

Subsequently the market was fairly firm, without any sensible change and with fair activity until last week, when new spirit in the demand brought back the rates of prices

paid to 118ps.

As we have mentioned in our former reports, our quotations have not fallen to what might have been looked for in consequence of the abundance of the crop, a result due to the special intensity of the demand for the article. This condition is likely to continue unless buyers should completely abstain from transactions for two or three weeks, and, thus cooling the market, bring down holders from their present demands.

Since our prices have gone beyond 110ps, the extreme East has ceased to operate here. The demand for America has also diminished. It is Holland chiefly which continues to buy at present rates. Whether the actual purchasers pay these prices, or whether they are the effect of previous contrac's entered into with the Dutch Company, is not certain. Anyway the demand for Holland continues

The sales of the month amount to 473 cases, plus 170 tale quale and Chiquinti. The total sales for this season amount to 2,896, plus 968 tale-quale and Chiquinti.

The arrivals during October reached 781 cases. Total arrivals this season, 5,152.

Up to October 19, 2,978 cases had been shipped from Smyrna, distributed as follows:-

						Cases
To London						024
,, Liverpool		• •				771
" America		• •				794
" Amsterdam	• •					300
" Hong Kong a	ınd Sir	agapor	Э	• •		343
., Continent						113
"Batavia	• •			• •	• •	33
						2.978

At Constantinople, up to October 19, the arrivals had reached 2,002 cases, and sales 1,500 cases.

The following are our closing quotations:-

						rei	r 10	. 1.0.b	<i>t</i> .
				Ps.		S.	d.	s.	ď.
Bogaditch			• •	130	=	14	6	to 0	0
Yerli				122	=	13	7	0	0
Carahissar				118	=	13	2	0	0
Common				115/116	=	12	10	13	0
Tale-quale and	Chic	uinti		98/107	==	10	11	11	11
-		_		,					

MR. RICHARD BARKER (Smyrna) states that of the 4,400 baskets remaining in the producing districts, about 2,000 will be kept in the interior until the month of March, 1882.

Mcssrs, A. & M. Zimmermann report as follows concerning Continental products:

Essence of Lemon,—The market has continued to harden as large forward contracts have been made for German and English requirements, and a good brisk demand for fruit by English dealers has prevented any purchases below the recent advices. The American buyers stand in a peculiar position: having latterly cleared Sicily of old stock of essences and fruit, their demand for new crop is not a pressing one just now, but sooner or later it will have to come forward, and a further rise of prices may then be depended upon.

Essence of Bergamot is if anything a little neglected, while

Essence of Orange is rather dearer.

Orris Root is rather lower, owing to more liberal quantities coming forward for sale.

Italian Castor Oil .-- Extra fine white had to be advanced 1s. per cwt.

Olive Oil.—Prices for fine quality are dearer in Leghorn, and a good business is being done at advanced rates.

Canthurides.—A few extra parcels have appeared on the Moscow market, which were disposed of at last prices.

Aniseed, Russian.—This year's crop is good as regards quantity, some 100,000 piculs are expected. The quality is very fair, and better in colour than last year.

Insect Flowers.—Dalmatian continue to be brought to the market of Trieste, and prices consequently are stationary. Buyers would do well now to provide themselves for spring requirements, as supplies are likely to be stopped very soon

through snow and frost. Otto of Roses is rather slow of sale for the time, owing probably to momentary requirements having been supplied by the deliveries of the new essence.

Essence of Gerunium.—Hardly any good quantities have appeared in the Constantinople market, and medium parcels therefore cost as much as fine qualities used to fetch.

Gentian Root is rather dearer this season, owing to the strict prohibition on the part of the Italian Government, to dig the root up, to prevent landslips, which have been rather frequent of late.

Glycerine keeps up well in price and demand, and competent observers believe in a maintenance of price, all the more since no further practical progress has been made in the recovery of glycerine from soap liquors.

Sulphate of Quinine.—German makers remain firm in price, and a better demand is apparent in this market. Prices may even shortly advance somewhat owing to an active inquiry for American.

Cinchonine Muriate and Cinchonidine Sulph. sell freely at

little reduced prices.

Wormseeds are now so low in price that Russian traders no longer bring them to market, because there is no margin of profit left to them. In former years a similar position has brought about a sharp reaction in price, which will no doubt again result this season.

Suntonine is now lower than it has ever been known before

The following notes are from Heinrich Haensel's autumn report on essential oils and essences:-

The extraordinary weather has interfered with the crops in all parts of the world; in Europe they suffered from excessive rain and cold, in America from fierce heats.

Caranay .- The best oil is always obtained from the Dutch seeds. In spring the prospects of the crop were very favourable, and the harvest is good as regards quantity, but the fruits are comparatively small and thin, and the yield of oil considerably reduced, so that the lower prices at the beginning of the year will not be maintained. The seed from Thuringia and the neighbourhood of Halle is good in colour and size, but it is chiefly used for other purposes, and the bad weather has hindered the development of the essential oil. The Russian crop is good, and prices are moderate, but the fruits are small, much mixed with other species, and yield but little oil. In Norway the crop is bad in most districts on account of the cold beginning and wet end of summer. The fruits are dull-coloured and damp.

Anise .- More aniseed was sown in Germany than in former years, but the dry spring prevented germination.

What has been gathered is good in colour and size, but, on account of the small yield, the price is very high, not less than 128 marks being asked for 100 kilos, of Thuringian seed. The Russian crop, which yields the best material for the essential oil maker, is good this year. Samples show that the fruit is handsome, large, and green, and cleaner than

Peppermint.—The crop in England and Germany may be re-arded as satisfactory. The intense heats which have prevailed in America have done great harm, and the want of rain prevented the early development of the plants.

Star Anise Oil cannot become cheaper. The price in China is still very high. Only 385 piculs had been received in Macao up to August, against 1,705 in the previous year.

Cassia Oil. -Buyers of this oil must be very cautious, as it is considerably adulterated before it leaves China.

Turkish Geranium Oil is considerably dearer, and is becoming scarcer. Ginger grass oil is being used as a substi-tute. This comes to us from the East Indies in iron drums holding 20 kilos.

Niobe Oil is a new chemical product from benzoic acid.

Juniper Berry Oil.—The prospects are not bad, and the samples already to hand promise good quality. The berries grown in the Carpathians show but a small admixture of dried green berries, but the Italian leave more to be desired in this respect. Lower prices can hardly be anticipated, as the weather has not been entirely favourable for the ingathering, and the large potato crop in Austrian Kröniand has absorbed so much labour that but few have gathered the juniper berries.

Oils.—Sperm and seal are still in good demand, the former being held for higher prices. Demand for olive is steady at about last month's figures. Linseed is rather weaker, but rapeseed is equally higher. Palm has not kept up to last month's. Turpentine is again advancing, but prices for future delivery are a little below those for prompt sale, and, though the present stock is low, the unusually large quantity of 9,000 barrels is reported affoat for London.

Petroleum has still further weakened, and has been quoted down to $6\frac{1}{18}d$. It is now a little stronger, being $6\frac{1}{8}d$. to 65 d. for spot and 61 d. for January-April. A few days ago 3,560 barrels were sold in London by auction, without reserve, of Britannia brand, Abel test, 73 and over, realising 6d and $6\frac{1}{16}d$, one lot only reaching $6\frac{1}{8}d$.

Monthly Statement of the Stocks of the following Drugs at the Port of London on October 30, 1881 and 1880.

	1881	1880		1881	1880
Aloescs	3,645	2,797	Gum (cont.)—		
"kegs	1	5	Damar pkgs	3,322	3,915
"gourds	42	344	Galbanum ,,	30	4
Aniseed, Star chts	787	362	Gamboge "	181	154
Arrowrootcks	11,793	14,312	Guaiacum ,,	58	40
" bxs & tins	7,807	11,312	Kino ,,	19	36
Balsamcks, &c.	14	19	Kowrietns	793	642
Bark, Medicinal			Masticpkgs	126	126
cks, &c.	994	972	Myrrh, E.I.	243	163
srns, &c.	44,726	24,791	Olibanum ,	6,390	2,751
Boraxpkgs	649	427	Sandarac ,	43	74
Bees' Wax . bls &			Senegaltns	5	15
srns	630	1,013	Tragacanth pkgs	1,514	2,446
,, cks & cs	1,468	2,314	Ipecaccks & bgs	177	123
cakes	10	252	Jalapbls	186	242
Wax, Jap.keg. pkgs	5,226	8.326	Nux Vomica pkgs	1,064	583
Camphorpxxs	6,040	6,678	1	_ ′	
Cardamomschts	611	250	Oil—		(
Cocc. Ind. bgs, &c.	717	897	Castorcks	_	167
Colombo root pkgs	1,429	425	,,cs	5.888	6,822
Cream Tartarcks	56	119	Palmtns	263	543
Cubebsbgs	93	93	Cocoanuttns	12,089	5,960
Dragonsblood chts	217	131	Olivecks, &c.	1,665	501
Galls, E.1. cks & cs	2,961	1,561	Aniseedcs	108	223
M'terranean sks	2,520	498	Cassiacs	472	315
	,		Opiumchts, &c.	1,691	1,029
Gum			Rhubarbchts	1,202	751
Ammoniac pkgs	280	349	Sarsaparillabls	601	514
Animi & Copal			Sennabla &c.	2,705	2, 00
pkgs	5,072	1,789		-,	_, .
Arabic, Barbary	,,,,	,	Shellac-		
pkgs	2,065	1,836	Orangechts,&c.	15,438	18 940
Turkey ,,	2,087	2,046	Garnet ,,	12,909	13,790
E.I,	2,842	2,304	Button ,	5,258	2 5 (3
Assafœtida ,,	444	159	Turmerictns	2,206	2,805
Benjamin.	2,290	2,370	Vermilion	49	117

Monthly Price Current.

The prices quoted in the following list are those actually obtained in Mincing Lane for articles sold in hulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Firms.

CHEMICALS.			t 1	Contl				М	onth	
Acetic per lh.	s. 0		to	s. 0	0	0	33	to		$\frac{d}{0}$
glacial ,,	0	$\frac{6}{11}$::	0	9	0	6 11	••	0	9
Benzoic Sublimate ,, Ex. Gum per oz.	6	9	٠.	0	0	6	9		0	0
Citric ,,	2	0	••	2	01	2	0		2	1
Gallic, Hydrochlorper cwt.	3 4	9 6	::	7	6	3	9 6	• •	7	6
Nitric per lb.	0	31/2	• •	0	4	0	33	• •	0	4
Oxalic, Sulphuric,	0	4‡ 1	• •	0	0	0	$\frac{52}{1}$	••	0	6
Salicylic,	7	6	• •	7 2	9	7	0	• •	$\frac{7}{2}$	9
Tartaric, English "	1	$7\frac{1}{2}$::	0	0	1	$\frac{6}{7\frac{3}{4}}$	•••	0	8
foreign ,, ANTIMONY, crude per cwt.	1 40	7	• •	0 41	0	37	$\frac{7\frac{1}{2}}{0}$	••	0	0
star ,,	55 24	0		57	0	53	0		54	0
Arsenic, lump,	10	9	::	0	0	24 10	6	• •	10	9
Brimstone, rough per ton rollper cwt.	125	9	::	130 9	6	127	6 9	• •	137	6
flour,	10	9		12	6	10	9		12	6
GLYCERINE, German refined,	119	0		135	0	110	0		135	0
crude brown ,, IODINE, dry per oz.	75 0	6	••	25 0	0 61	75 0	6	• •	25 0	0
resublimed ,,	0	8	::	0	8	0	8	::	0	0
MAGNESIA, calcined per lh. Hwds	1 5	0	••	1 0	6	1 5	0	::	0	6
MERCURYper hott.	125	0		125	0	127	6	::	130	0
PRECIPITATE, red per lh. white,	3 2	0 11	::	0	0	3	0	::	0	0
PRUSSIAN BLUE ,,	0 17	0 6	٠.	0	0	17	6	••	0	0
SALICINE	12	0	::	0	0	12	0	::	0	0
THYMOL,	24	0	••	0	0	24	0	••	0	0
Alum per ton	120	0	••	140	0	120	0	••	125	0
powder ,, Ammonia:	135	6	••	140	0	135	0	••	149	0
Carbonate per lh.	0	$6\frac{3}{4}$	••	0	$6\frac{1}{2}$	0	$6\frac{1}{4}$	••	0	$6\frac{1}{2}$
Hydrochlorate, crude, white per ton	600	0		76 0	0	600	0	٠.	76 0	0
Sulphate, Argol, Capeper cwt.	410 80	0	••	420 98	0	410 80	0	••	430 98	0
кеа,	65	O		80	0	65	0		80	0
Oporto, red ,, Sicily ,, ,,	36	0	::	36 0	6	36 0	0	::	36 0	6 0
Bleaching powder, Borax, British refined.	60	0	• •	5 63	3	5 61	0	••	$\frac{5}{62}$	3
Calomel per lb.	2	8	••	0	0	2	9	::	0	0
Chloral hydrate, Saame's ,, Liebreich's ,,	5	. 2 6	::	$\frac{4}{6}$	4	4 5	6	::	4 6	4 0
Copper:						20				
Sulphateper cwt. Copperas, greenper ton	19 45	6 0	::	0	0	45	0	••	20 0	3 0
Copperas, green per ton Corrosive Suhlimate per lh. Cream Tartar, French per cwt.	120	0	••	120	0	$\frac{2}{120}$	2 0	• •	121	0
hrown	100	0	••	0	0	100	0	••	0	0
Epsom Salts, Glauher Salts,	4	0	::	4 5	9	4	0 3	::	4 5	9
Magnesia: Carbonate	42	6	••	0	0	42	6	• •	0	0
Pond, Hwds,,	72 6	9	::	0 7	0	72 6	9	••	7	0
Phosphorus per lh. Potash:	1	11	••	2	0	1	11	••	2	0
Bichromate	0	6		0	0	0	6		0	0
Carbonate: Potashes, Canada,										
1st sort per cwt. Pearlashes, Canada,	29	0	••	0	0	29	0	٠.	0	0
1st sort	36	0	••	0	0	36	0		0	0
Chlorate per lh. Prussiate	0	6 9 1	::	0	$\frac{6\frac{1}{8}}{10\frac{1}{2}}$	0	6 10	::	0	0 10 1
red,	1	11	• •	0	0	1	$10\frac{1}{2}$	••	0	0
Potassium:	9	6	••	10	0	9	0	••	10	0
Bromideper cwt.	1 9	5	••	1	6	1 9	5	• •	1	6
Iodide per lh.	8	ŏ		8	9	7	9	•••	0	Ü
Quinine: Sulphate, British, in										
bottles per oz. Sulphate, French ,,	9 9	0	••	0	0	8 8	0 6	••	0	0
Sulphate, German ,,	7	0	••	7	6	7	0	::	7	6
Sal Acetos per lh. Sal Ammoniac, British per cwt.	0 44	$\frac{6\frac{1}{2}}{0}$	• •	0 4 5	$\frac{67}{8}$	0 44	7	••	0 4 5	0
Saltpetre:					v		Ü	•		J
Bengal, 6 per cent. or under,	24	0		21	6	23	3		23	6

			-			_				
Saltpetre :—(cont.)		Las	t M	[ont	h		Th	is N	Iontl	
Bengal, over 6 per	S			8.	d,	S.			s.	
centper cwt.	22		to			22	3	to		0
British, refined,	27		• •	29		28	0	• •	30	0
Sola: Bicarbonate . ,,	1 .9		• •	10		1 .9	9	• •	10	0
Hwds ,,	45	0		0	0	45	0	• •	0	0
Carbonate:	1 .	1.7		0	-	1 0	1.9		0	0
Soda Ashper deg	0		• •	0	0	63	13 9		0	0
Soda Crystals per ton	71	3 9	• •	10	3	9	9	• •	$\frac{0}{10}$	3
Caustic	8	0	• •	- 0	0	8	0	• •	0	0
Hyposulphiteper cwt.	14	3	• •	14	6	14	3	• •	14	6
Nitrate ,, Zinc Sulphate ,,	12	0	• •	14	0	12	0	• •	14	Ü
SUCAR OF LEAD White	36	ő	• •	38	Ü	37	Ü	• •	0	ŭ
	26	ŏ		()	ŭ	26	ŭ		0	ŭ
VERDIGRIS per lb.	0	103		í	2	0	8		ì	2
VERMILION, English ,,	2	5		ō	U	2	8		0	0
China ,,	2	2		0	0	2	6		0	0
DRUGS.										
Aloes, Hepaticper cwt.	70	0		140	Э	70	0		140	0
Socotrine ,,	55	0		180	-0	55	0		180	0
Cape, good ,,	60	0		64	0	52	0		56	0
1nferior,	49	0		49	6	49	0	• •	51	0
Barbadoes ,,	50	0	• •	180	0	45	0	• •	180	0
Curaçoa ,,	45	0	• •	127	6	54	0	• •	130	0
Ambergris, grey per oz.	90	0	• •	120	0	100	0	• •	110	0
BALSAM—	1	0		1	3	1	5		0	0
Canada per lb.	1 2	2	• •	1 2	6	2	4	• •	2	6
Capivi, Peru	9	6	• •	10	0	10	0		$1\tilde{0}$	6
	2	2	• •	0	0	2	9		0	ő
Tolu, BARKS—	-	~	•••	J	,	_		•		_
Canella alhaper cwt.	25	0	٠.	26	6	25	0		26	6
Cascarilla,	16	6		20	0	17	6		19	0
CINCHONA-										
Peru, Crown and										
Grayper lb.	0	8		2	10	1	0		2	9
Calisaya, flat ,,	2	0		3	6	2	0		3	6
,, quill ,,	2	0		6	3	2	6		6	3
Carthagena,	0	4		2	9	0	4		2	11
Columbian,	0	6		3	6	0	6	• •	3	3
Cuprea,	1	0	• •	2	4	1	0	• •	2	4
New Granada ,,	1	6	• •	5	0	1	6	• •	5 2	0
Pitayo & Maracaibo ,,	0	3	• •	2	8	$\begin{array}{c c} 0 \\ 1 \end{array}$	3	• •	10	3 6
Red, East India,	1 0	5 5	••	9	6	0	5	••	2	0
good le fino	2	1	••	7	9	2	1	• •	7	ŏ
BUCHII LEAVES	ő	2	• •	ő	9	ű	2	•••	0	8
CAMPHOR, Chinaper cwt.	85	õ	• •	ő	ő	87	6		ŏ	0
Japan "	87	6	::	90	ŏ	90	0		Ü	Ü
Refin. Eng per lb.	1	31/2		0	0	1	31		0	0
Tablets ,,	1	4		1	$4\frac{1}{2}$	1	$4\frac{7}{2}$		0	0
CANTHARIDES, China ,,	1	4		1	5	1	4	٠.	1	5
" Russian "	3	6		3	9	3	6		3	9
CHAMOMILE FLOWERSper cwt.	25	0		75	0	25	0		75	0
Castoreum per lb. Dragon's Blood, lp per cwt.	25	0	٠.	35	0	25	0	• •	35	0
FRUITS AND SEEDS (see also	80	0	• •	275	0	80	0	• •	260	0
Seeds and Spices)										
	82	6		87	6	82	6		87	6
Anise, China Starper cwt.	20	6	• •	36	0	36	0	• •	38	0
Spanish, &c ,, Beans, Tonquin per lb.	7	0	• •	12	0	4	6		11	ŏ
Cardamoms, Malabar,			• •	14	V	-		• •		
Foon	6	3	٠.	8	6	6	3		9	0
inforior	3	Ű		6	ŭ	3	0		6	ŏ
Aleppy ,,	2	6		6	9	2	6		6	9
Madras ,,	2	6		4	G	2	6		4	6
Ceylon,	2	0		3	6	2	0		3	6
Cassia Fistulaper cwt.	12	0	٠.	15	0	12	6	• •	20	Ç
Cocculus Indicus	7	6	٠.	8	6	10	0	• •	11	0
Colocynth, apple per lh.	0	6	• •	1	0	0	6	• •	1	0
Croton Seedsper cwt.	65	0	٠.	67	6	65	0	• •	67	6
Cubehs,	200	0	• •	0	0	205	0	• •	2:0	0
Cummin	35	0	• •	38	0	35	0	• •	12	0
Fenugreek,	$\frac{9}{14}$	0	• •	13 15	0	14	0	• •	$\frac{13}{15}$	0
Juniper Berries "	8	0	• •		0	8	0	• •	10	0
Nux Vomica ,, Tamarinds, E. India ,,	5	6	::	10 11	0	5	6	• •	11	0
West India,	9	3	::	13	0	9	3		13	0
Vanilla, large per lb.	24	0		28	0	23	0		26	6
interior,	16	0		23	6	16	0		22	6
GINGER, Preserved ,,	0	48		0	9	0	48		0	9
Honey, Chiliper cwt.	40	0		54	0	5)	0		6 0	0
Jamaica ,,	34	0		49	0	36	0	• •	49	0
1PECACUANHA per lb.	4	0	٠.	4	9	3	10	• •	4	4
Isinglass, Brazil,	2	6	• •	4	11	2	6	• •		11
Tongue sort "	2	6	• •	5	5	2	6 10	• •	5	5
East India ,		10 8	• •	5	0	0 2	10 8	• •	5 4	0 5
West India,	7		• •	4	5	7	0	• •	10	
Russ. long staple ,, inferior	0	0	• •	10	0	ó	0	• •	0	0
Cimaria	2	3	• •	0 2	6	2	3	••	2	6
JALAP, good,		10	::	ī	0		10		ĩ	Ö
infer. and stems "	ő	7	::	ō	91	0	7		ō	$9\frac{1}{2}$
LEMON JUICE per deg.	ő	0	::	Ű	0	0	0		0	0
Lime Juiceper gall.	1	9		2	ŏ	1	9		2	0
Liquorice, Spanishper cwt.	0	0		0	0	0	0	٠.	0	0
Liquorice Root ,,	0	0		0	0	0	0	• •	0	0
Manna, flaky per lh.	4	6	••	5	0	4	6	• •	5	0
MUSK, Pod per oz.	11	0	• •	61	0	15	0	••	63	0
Grain,	30	0	• •	63	0	30	0	• •	63	0
Yanan,	32	0	• •	38	6	32	0	• •	3 8	6
OILS (see also separate list)	,	4		0	0	1	5		0	0
Almond, expressed per lh.	1	4 3§	• •	0	$\frac{0}{4\frac{1}{4}}$	0	33	• •	0	41
Castor, 1st pale,	0	3 1		0	35	0	34	::	ő	3 1
Cod-liverper gal	_5	0		5	6	4	6		5	6
, , , , , , , , , , , , , , , , , , ,	à-	-								

SARSAPARILLA, Lima per lb. Guayaquil , Hondhras , Jamaica , Jamaica , SASSAPHAS per cwt. SCAMMONY, Virgin per lb. second and ordinary , SENNA, Bombay , Tinnivelly , Alexandria , SPERMACETI, refined , American , SQUILS , GUMS. AMMONIACI, drop per cwt. ANIMI, fine washed , sorts , ARABIC, pale picked , sorts , TUREEY, pick. gd. to fin. , second & inferior , sorts , ASSAFGETIDA, cm. to fin. , BENJAMIN, 1st & 2nd ,	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Oils, continued:— SPERM BODY. per tun COD. "VELOW "Vellow "Vellow "Vellow "Norwn" East India, Fish "NoLIVE, Seville per ton Gioja. "Levant "Nogador "Spanish "Spanish "Spanish "Spanish "Nogador "Spanish "Nogador	5 0 10 0 47 6 0 0	This Month £ s, £ s, 0 0 to 0 0 30 0 0 0 28 0 29 0 27 0 27 10 21 0 23 0 0 0 0 0 27 0 27 10 21 0 23 0 0 0 0 0 0 23 0 0 0 42 0 0 0 33 0 0 0 33 0 0 0 33 0 0 0 35 10 28 10 25 12 0 28 10 25 12 0 28 10 25 12 0 28 10 25 12 0 28 10 25 12 0 28 10 26 0 0 0 27 10 28 10 28 10 28 10 28 10 28 10 29 0 31 10 29 5 29 7/6 0 0 0 0 0 25 12/6 26 0 31 5 31 10 29 5 29 7/6 0 0 0 0 0 28 0 28 10 29 0 30 0 65 10 45 0 0 65 0 6 6 5 0 6 6 5 0 6 6 5 0 6 6 5 0 6 6 6 0 0 0 0 6 0 0 0 0 6 0
ROOTS—Calnmba per cwt. China "" Chiretta per lb. Galangal per cwt. Gentian " Orris " Pellitory per lb. Rhatany " Seneka " Snake " SAAFFRON Valencia " SALEP per cwt. SARSAPARILLA, Lima per lb. Guayaquil " Hondnras " Jamaica " Jamaica " SASAPARS PAS Per cwt. SCAMMONY, Virgin per lb. second and ordinary " SENNA, Bombay " Tinnivelly " Alexandria " SFERMACETI, refined " American " SQUILLS " GUMS.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	LINSEED, English Black Sea & Azof , Calcatta " Bombay " St. Petersburg " Mustard, brown per bshl. white " Poppy, East India per qr. SPICES. CASSIA LIGNEA per cwt. Vera " Bonds " CINNAMON, Ceylon: 1st quality per lb. 2nd do. " 3rd do. " Tellicherry " Chips " CLOVES, Penang " Amboyna " Zanzibar " Ginger, Jam., fine per cwt. Ord. to good " African " Bengal " Malabar " Cochins " Bengal " Malabar " Cochins " Bengal " Malabar " Cochins " Cochins " Bengal " Malabar " Cochins " Cochins " Bengal " Malabar " Cochins "	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Animi, fine washed, sorts, Arabic, pale picked, sorts, and to fine Turkey, pick, gd. to fin., second & inferior sorts, Assafection, cm. to fin., Benjamin, 1st & 2nd, Copal, Manilla,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	White Cayenne " Cayenne" " MACE, 1st quality " 2nd and inferior " NUTMEGS, 78 to 60 lbs. " 90 80 " 132 95 "," PIMENTA VARIOUS PRODUCTS. COUHINEAL— Honduras, black per lb. " silver " Mexican, black " " Teneriffe, black " " " " " " " " " " " " " " " " " " "	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 5\frac{2}{3}\cdots 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
KOWRIE, SOrts selected " MASTIC, picked	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	INDIGO, Finest Bengal , Gnatemala Flores SOAP, Castile per cwt. SOY, China per gall. TERRA JAPONICA— Gambier per cwt. Free enbes , Cnteh , WAX, BEES, English , Jamaica , East India , VEGETABLE, Japan , WOOD, DYE, Bar per ton Brazil , Cam , Jamaica , Jamaica , Jamaica , Jamaica , LIMA, first pile , RED SANDARS ,	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7 3 7 7 6 9 7 0 28 0 7 0 0 1 11 0 0 0 1 11 0 0 0 1 11 0 0 0 1 11 0 0 0 18 9 19 0 29 6 23 0 0 \$40 0 \$40 0 \$40 0 \$40 0 \$40 0 0 \$40 0 0 0 0 0 0 18 0 27 0 0 0 0 0 0 5 0 5 15 0 0 0 5 15 0 0 0 5 15 0 0 0 5 15 0 0 0 5 15 0 0 0 5 10 10 10 11 10 8 10 0 0



THE FRENCH REPORTS ON THE LONDON INTERNATIONAL PHARMACEUTICAL CONGRESS.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—I have read in your Journal and also in the German Pharmaceutische Zeitung the reports by Dr. Méhu and M. Ferrand on the late Congress in London, commenting on the proceedings and decisions arrived at, and I find, like everyone who has read these reports, that they are full of reproaches and complaints as to what was done in London.

It is not my intention to defend our English brethren from these unjust and absurd reproaches, because the extremely kind reception, the incomparable bospitality and friendship, manifested to all the delegates, without any distinction of nationality, by our English colleagues in such a munificent manner, as well as the very fair and impartial conduct of the business, have been so highly appreciated and acknowledged by all the other delegates who had the pleasure of being present at the Congress, that it would be superfinous to do so. But it does not seem to me superfluous to point out to our French brethren that the complaints made by Dr. Méhn and M. Ferrand are entirely unjust and incorrect.

The first reason alleged for the French complaints is the election of the Congress officers. The French reporters complain that France sent 12 delegates and only had one Vice-President. Everyone who has taken part in such a Congress will be well aware of the difficulty attending such a selection, and that there will be always possibility of some discontent. As a member of the Committee deputed to recommend the officers of the Congress, I know that the principles acted upon in that selection were the same as in all previous International Pharmac cutical Congresses. It was not the number of delegates from any particular country that formed the basis for the selection of officers, but, first of all, it was the desire to have every country represented. For this reason one representative was chosen for each nationality—generally the President or Vice-President of the largest Pharmaceutical Society. Upon this principle there were proposed:—

Messrs. Brunnengräbe	r	 			for	Germany
Gille		 			,,	Belgium
Hansen		 			,,	Norway
Lotze	• •	 			,,	Denmark
Martenson		 	• •		7.	Russia
Petit	• •	 			,,	France
Sebardt		 			,,	Sweden
Sinimbergbi		 			,,	Italy
Törok		 		••	,,	Hungary
Waldheim		 				Anstria

Then the Committee, having regard for such delegates as merited distinction by reason of their having been officers of past Congresses, or from being representatives of their Government, also proposed Mr. Dittrich, who was President of the first Pharmaceutical Congress in Brunswick; Mr. Madsen, one of the Vice-Presidents of the St. Petersburg Congress; and Dr. Poehl, attending as a delegate from the Russian Government. I may also point to the circumstance that 11 out of the 12 delegates from France had never before taken part in a Pharmaceutical Congress, so that, in that respect at least, their names were unknown to the members of the Committee, and any further selection from among them would have been very difficult, if not impossible.

The second complaint is that the French delegates could not sufficiently understand what was said in the discussion, because the translation into French was very defective and curtailed, as well as in some cases intentionally shortened.

I had the honour to act sometimes as the interpreter at the Congress, and every time I did my best to give a truthful translation. If I failed to make myself understood I am sorry, and it was not my fault that we had no better interpreter. But I must positively rebut the dishonouring insinuation that I ever intentionally shortened my translation or suppressed words that had been used by a speaker. On the contrary, this insinuation appears to me almost ridiculous, as I certainly think it must do to others, because none of the subjects discussed at the Congress afforded any reason at all for being treated of with secrecy between any of the nations represented at the Congress. There were also many delegates present at the Congress who spoke two or three languages, and I need only name Dr. De Vrij, Dr. Hoffman, and Messrs. Petit, Madsen, Lotze, Oldherg, and Sinimberghi, all of whom were able to control my translation, and to offer any correction if it had been necessary. M. Petit, who spoke English fluently, and understood it as well, could at any time have said if my translation from the German into French differed from my translation from German into English, and I remember quite well, on one occasion, when I was under a mistake in the discussion on pharmaceutical education, and thus gave an incorrect translation, I was interrupted by several delegates, who pointed out my mistake, this being the best proof that a very good control was exercised.

But the French complaint appears the more unreasonable when we consider that every delegate had the opportunity of speaking in his own language, and could, therefore, make known that he was not able to understand the discussion sufficiently. However, the English report of the Congress, published in the *Pharmaceutical Journal and Transactions* of August 6, 1881, plainly shows that, besides M. Petit and Dr. Méhu, none of the other ten French delegates took part in the discussions. It was, therefore, impossible to know that these delegates, as some of them say now, did not understand what was going on.

Dr. Méhu also characterises the Congress as an Anglo German league having private conventicles! He does that because some members of very different nationalities, who happened to be living in the same botel, had upon one occasion some conversation—not privately nor officially, but in a perfectly epen manner—upon the subjects that were to be dealt with at the Congress. Does not this complaint call to mind the Latin proverb—"Risum teneatis amici"? And with regard to all the other complaints made by the French—Sapienti sat.

Vienna, November 4.

A. v. WAIDHEIM.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—The *Pharmaceutical Journal* (October 15, 1881, p. 320) criticises the letter which I had the bonour to address to you on September 19, 1881, in order to rectify certain assertions which had appeared in the report of the International Pharmaceutical Congress of London, and which you kindly inserted in your last number.

Requested to reprint that letter for the enlightenment of its readers, the *Pharmaceutical Journal* preserves profound silence; the number dated October 22, 1881, has no trace of such reproduction. It was an act of extreme prudence.

Whenever I have been requested I have hastened to furnish the Organising Committee of the Congress with any information asked of me, and I am always at their service for any details which they may judge would be useful to them.

The Pharma ceutical Journal (October 15, 1881, p. 320) considers that I read the report of the Congress "with a jaundiced eye." Its anonymous editor may find this expression novel, "spirituelle," and polite; I doubt if his contemporary Punch would be of this opinion.

The French delegates were not the only parties discontented with the om ulpotence of the Anglo-German league. I could mention several delegates, not French, who carried away from the London Congress painful impressions. One wrote to me on October 12:—"Our London Congress has left me, as it did you, with very disagrecable impressions. We should have needed to have been hermetically scaled not to have perceived the bad spirit which reigned in the brain of some of the members, and ".... I dare not continue this quotation, fearing lest the anonymous editor of the Pharmaceutical Journal should inform his readers that all the pharmaciens delegated to the Congress by other than German countries had the jaundie, and I should regret to bave provoked such a graceful compliment.

The anonymous editor of the *Pharmaceutical Journal* further professes that the report of the Congress which he published in August was not official. It is rather late to make the fact known, as the report has since been published in most of the journals of pharmacy of Europe and America. At all events this note gives us some reason to hope for a new history of the London Pharmaceutical Congress, and it will not be I who will complain if the report he at the same time complete and impartial.

In my letter of September 19 I said the nomination of MM. von Waldheim and R. Goddefroy as respectively president and secretary of the Committee of the International Pharmacopoeia appeared to me to be irregular, as the Committee had not been completed, and as all the members were not convoked for the purpose of electing the president and secretary. It appears, as I am told by Mr. Carteighe, that the nomination took place in the course of a pleasure party (inter pocula) at Henley-on-Thames, which in no degree reduces the irregularity, as only a part of the Committee were present.

Yesterday M. von Waldheim asked me, in the name of the Congress, for the project of an International Pharmacopoeia. I immediately replied that I would submit his request to the Societé de Pharmacie of Paris on November 2 next, tut that I thought I ought to remark first of all that the bureau of the International Committee for an International Pharmacopoeia, or for the equalisation of powerful medicaments, had not yet been regularly constituted. Up to that moment the senior member alone had the qualification to act in the name of the Committee.

The Pharmaceutical Journal (October 1, 1881, p. 291) reproduces a page from the British Medical Journal (September 24, 1881), which reports the session when the Pharmaccutical Congress met in the section of Materia Medica and Pharmacology of the International Medical Congress. At that meeting there were only a few physicians present, who were generally favourable on the whole to the idea of an International Pharmacopocia. At that session M. R. Goddefroy bitterly reproached me with being the detainer of the project of an International Pharmacopocia, which the Vienna Pharmaccutical Congress (1869) had asked the Société de Pharmacie of Paris to prepare. According to M. Goddefroy, the Paris Society ought to he dispossessed of the manuscript (for the benefit of the Anglo-German league, no

doubt), although the St. Petershnrg Society had not fulfilled the mandate which it had accepted from the Fourth Pharmaceutical Congress (St. Petershurg, 1874). And M. Goddefroy coucluded by rejecting the application that I had addressed to the London Congress to authorise the Paris Society to print the project of the Pharmacopeia. Thereupon I read the following motion, which had previously received the approbation of several French and foreign delegates, and of which I left a copy with the committee:—

"The International Medical Congress of London confirms on the one hand the totality of the decisions of the Medical Congresses of Geneva and Amsterdam, and on the other hand, the totality of the decisions of the Pharmaceutical Congresses of Vienna and St. Petersburg, relative to the compilation of an International Pharmacopæia, and requests the Société de Pharmacie of Paris to publish the project of the International Pharmacopæia asked for by the Vienna Cougress, and which the Society has a'ready submitted to the St. Petersburg Congress in 1874.

"The Société de Pharmaeic of Paris will utilise the suggestions made on the manuscript by various members of the St. Petershurg Congress, and will make any additions which it may judge desirable.

"The International Medical Congress of London authorises the Société de Pharmacie of Paris to collect the observations which may be addressed to it after this first publication, to réumer them, and submit them to the next Medical Congress, which shall utilise them for a definitive edition of an International Pharmacopous, satisfying more completely the requirements of the art.—C. Meuv.—August 5, 1881."

Oue word more. The project of an International Pharmacopeeia has never been submitted to the Germans, who have so severely criticised, although they were not represented at the Fourth Cougress. The assertiou of M. Brünnengrüber, therefore, as to "the French Pharmacopeeia teing made the b.sis of an International Pharmacopeeia," has no raison d être.

Accept my thanks, sir, for the favour of space in your journal, and with compliments. &c.

47 Rue Jacob, Paris, October 23, 1831.

C. Méhu.

BRITISH ENTERPRISE AT A DISCOUNT.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—Have we in Great Britain any drug manufacturers with sufficient ingenuity to make little pellets or discs of such simple and useful substances as chlorate of potash, carbonate of soda, &c.? If there he such, how is it that a Yanke maker of these articles is permitted quietly, but none the less snrely, to establish a monopoly of the "compressed medicines," as they are termed, in this country?

"Have you any of those American solid cakes of chlorate of potash?" is already becoming a stereotyped query from our customers. "My doctor recommends them as so much superior to the lozenges."

We are not sure whether the articles in question are strictly a specialty of the wholesale druggist, or the lozenge maker; but whichever it may be, it is clear that patriotic and selfish motives should combine to determine him to elbow out the intruder—remembering especially the sort of reception which Brother Jouathau consistently accords to every product of English labour.

Heartily wishing that one or more of our manufacturers may act upon this hint,

We are, sir, yours faithfully,

Bradford, November 5. M. Rogerson & Son.

The couduct of the United States, France, and other countries in repelling British products from their shores as much as they can is not unnaturally irritating, and human nature is so constituted that suggestions of revenge are generally pleasant. But we think our correspondents are judging the question through the extraordinary "fair trade" spectacles which bave lately had a little vogue among us. Their letter compels us once more to develop a small free-trade lecture. England has become above all other countries the market place of the world, and if it were not too long. and, we may add, too obvious a story, we could show that she owes that position to a large extent to her free-trade policy. Where would be the advantage of checking this tendency of concentrating commerce in England? Suppose we were to drive all these Americans, French, and Germans out of the country. They, the individuals, would no doubt he injured, but would this nation as a whole benefit? Surely not. England's commercial policy is to attract to herself all the talent and enterprise she can absorb, no matter from whence it comes, and actual results will sufficiently indicate the limits of absorption. There is no law to compel our correspondents to buy American products, nor to compel their neighbours the doctors to recommend them. If there were such a law, there would then be a real grievance. But on the other haud, the grievance would he none the less real if by law, or hy any artificial restraint, consumers (who after all are the hulk of the nation) were prevented from buying what they wanted, and from whom they pleased. Free trade, it should be clearly understood, is not the rolley of this country out of any sentimental regard for Americans or others, but simply out of regard for our own interests. These remarks are to auswer the spirit of the above letter rather than its exact words.—Ed. C. & D.]

215/55. R. W. H.—There is no published formula for Composition Essence. A formula for Coffin's Composition Powder is given on page 426 (September). "Bayberries" is a misprint for "Bayberry," by which the herbalists understand bayberry bark,

PROPRIETARY RIGHTS IN WORDS AND PHRASES ON LABELS.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

Sir,—No doubt it may interest some of your readers to peruse a copy of a letter which we, in common, no doubt, with other ehemists, have received from the Solicitor to the Trade-mark Protection Society. From this it will be seen that there are individuals among us who conceive that they can, so to speak, "buy up," for their own exclusive purposes, current words and phrases in the mother tongue, and are prepared to enter into litigation in furtherance of their assumed right. Here is the letter:—

September 14, 1881.

Sir,—I am instructed by Mr. C. Wheeler to communicate with you respecting your use of the words "soft, white hands," such words being a portion of my client's registered trade-mark, No. 32, advertised in the Trade Marks Journal, page 529, for 1878.

portion of my chefits refreshed that the Trade Marks Journal, page 529, for 1878.

I have to inform you that unless you enter into an undertaking to discoutinuc the use of the words complained of, and to withdraw all labels bearing the objectionable words from the trade, I am instructed to take

immediate proceedings against you.

It is necessary I should hear from you by return of post.

Yours obediently,
J. SEYMOUR SALAMAN,
Solicitor for the Trade-mark Protection Society.

The first impulse on the part of the uninitiated recipient of such a letter is an indignant resentment of a palpably unreasonable claim, and a determination to "fightit out to the last"; but an appeal to an excellent experienced and practical friend put the matter in a nutshell. Said onr friend, "He may be willing to go to law as an advertisement: are you?" Exactly so; and when one considers that five minutes' reflection on the part of a person of average mental capacity would produce as many titles of more attractive character than the one in dispute, can there be a reasonable doubt as to the proper course to pursue?

We are, sir, yours faithfully,

R. & S.

"Epsilon" (36/80) writes: The following passage ocenrs in the Pharmaey Amendment Act (1868), and relates to persons exempted from its operations:—"The husiness of wholesale dealers in supplying poisons in the ordinary course of wholesale dealing."

Will you kindly inform me what constitutes "wholesale dealers" within the meaning of the Aet; or, in other words, what is the smallest quantity of any poison that can lawfully be sold by any whole ale dealer who is not a qualified chemist?

[There is no limit as to quantity, and it would be very difficult, if not impossible, to frame a satisfactory scale which would be applicable to every kind of poison. The Act is defective in not giving an authoritative definition of a wholsesale dealer; but the term may be taken to mean a person whose business is to sell (amongst other things) poisous to persons who are legally qualified to retail, dispense, or compound the same, including pharmaceutical chemists, or che nists and druggists, apotheearies, veterinary surgeons, and manufacturers of patent medicines, the last-mentioned class of persons having the anomalous privilege of sending out poisons without any safeguard whatever for the public. In clause 17 of the Act, reference is made to "sales hy wholesale to retail dealers in the ordinary course of wholesale dealing," which shows the intention to limit sales by unqualified persons in the manner above indicated. They must not sell to the general public poisous for consumption by their customers.]

215/42. Analysis of Urine.—Expe iment writes:—"By adding yeast to diabetic urine I have converted the sugar into alcohol, thus reducing the specific gravity from 1·040 to 1·010. How am I to obtain the alcohol free from the ammonia which comes over with the distillate? I use Wanklyn's method for testing for the free and albumenoid ammonia.

[If dilute sulphuric acid in excess be added to the urine the aleohol can be distilled over, free from the ammonia, thou h perhaps not pure enough for estimation by specific gravity. The addition of alkali will then liberate the free ammonia, and Wanklyn's whole process can be carried out without difficulty]

215/3. Veterinary Surgeons Act.—W. P. and Others.—The regulations which must be observed to obtain registration under the above Act have not yet been published. We will take care that they appear in this journal at the earliest possible date.

The Act prohibits the use of the title "veterinary surgeon" after December 31, 1883, and after that date only veterinary surgeons will be able to recover fees or charges for veterinary operatious or advice. Charges for veterinary medicines will still be recoverable, and no one will be prohibited from performing veterinary operations or giving veterinary advice for cash, providing that he does not in any way hold himself out to be a registered veterinary surgeon. If he gives credit for advice the debtor will be able to repudiate the debt.

214/53. II. II.—Bisulphite of Lime is obtained almost as a waste product in the Leblanc process of manufacturing soda-ash, and the production could be increased indefinitely if the demand raised the price to a remunerative point. It is only as a bye-product, and when the materials required can be obtained for nothing, or are troublesome waste which it pays to get rid of, that this compound can be manufactured at a profit.

215/61. A. E. I. — Compound Syrup of the Hypophosphites: Churchill's Syrup.—The Committee for the Revision of the United States Pharmacopæia are among the most reliable recent authorities on pharmaceutical questions. In their report they suggest the subjoined alternative formulæ for this syrup (parts are all by weight):—

	Α.			
Take of—				Part
Hypophosphite of	calcium, thirty parts			30
,,	sodium, ten parts			10
**	potassium, ten parts			10
Citrie acid, one par	rt			I
Spirit of lemon, tw	o parts			2
Sugar, four hundre	ed and fifty parts			450
Water, a sufficient	quantity			qs.
Mix the three hypophos	sphites, reduce them	to pow	der,	
nd gradually add, uuder	trituration, water,	three .	hun-	
mad someto				900

Finally, dissolve in this the sugar by agitation, without heat, and strain.

¶.... The amount of sugar has been reduced, as it is apt to partially eparate in a solution of hypophosphites. Mr. S. A. D. Sheppard furuishes the following formula:—

В,			
Take of—			Parts
Hypophosphite of calcium, three parts			3
,, sodium, two parts			2
" potassium, one part	• •		1
Boiling water, thirty parts			30
Citric acid, one part			1
Tincture of vanilla, one part			1
Syrup, fifty parts		• •	50

Dissolve the hypophosphites in the water, using the citric acid to dissolve the last portion; then add to the solution the syrup and the tincture of vanilla. Filter through paper.

The hypophosphites are to be purchased realy made. There is no formula for their preparation in either the Pharmacopæla or the Revision Report.

We know of no published formula for Goddard's Plate Powder.

The formula for Tinctura Ergotæ Ammoniata is given ou p. 320 of our July number.

Essence of Rennet.—Soak a calf's stomach (cut into small pieces) with 6 oz. salt in Oij. of warm water for 24 hours. Strain, and add the following:—

O1	. piment.	 	 	 • •	gtt. xij.
O1	. myrist.	 • •	 	 • •	,,
O1	. amygd. ess.	 	 	 	٠,
01	. limon.	 	 	 	,,
Ol	. caryoph.	 	 	 	,,
S.	V.R., ad	 	 	 	Зij.
	,				•

And filter.

This is very troublesome to filter. Some of this exposed in an ordinary shop-bottle for three years still retains its properties.

7/215. A. B.—We cannot undertake to draw up labels for you, and guarantee that the bottles they cover will not be subject to stamp duty. You cannot make an effective label for a proprietary medicine, and evade the medicine stamp duty. For iustance, you may not call your preparation yours. That is, you may not say "-----'s Indigestion Mixture," because if you do you claim a proprietary interest in it. For the same reason you may not say, "Prepared only by _____." Then, again, you may not on the label, nor by any other printed means, recommend your medicine as a remedy for any disease or disorder incident to humanity. You may call it "Indigestion Mixture," but you may not eall it "Mixture for Indigestion." You might probably on your label name your medicine, name the dose and any general directions about taking it, and add your name and address; beyond that you can only venture at your peril. You must further be careful in choosing your titles not to infringe on any one else's rights. For example, among the articles for which you want labels you give "Bloot Mixture," a compound term to which Mr. Clarke, of Lincoln, has established an exclusive right.

53/211. Hopeful.—We do not see our way to make the Diary very useful as an educational work, as the limited space we could space for that purpose would not suffice to supplant the excellent works so easily obtainable.

217/3. Chemist.—Full details for the manufacture of soluble essence of ginger will be found in The Chemist and Druggist for 1878, p. 375; 1879, p. 371; and 1881, p. 375.

THE MAJOR EXAMINATION: AN IMPEACHMENT.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

Sir. -- Season after season the enigmatical results of the Major examination are published in the journal without evolving comment either from the sufferers or their more fortunate brethren. This month renews the old sad tale: "twelve examined, three passed!" Now, sir, to my certain knowledge, five of the candidates were fellows of at least average ability, who had been working conscientiously for examination for periods of from 10 to 15 months, and under teachers of recognised ability, and only one of these five passed! The examinations of the Pharmaceutical Society require entire remodelling. In the first place, it is a scaudalous shame that fellows should go up presumably to the same examination and practically undergo such a different ordeal. The standards of the various examiners are entirely different, and the result is by no means that the best man succeeds, but rather that the luckiest succeeds-be who gets the most reasonable examiners. Also the idiosyncrasy of the individual, his coo!ness, or want of coolness, &c., makes a vast difference. Now, sir, most of this unfair difference could be swept away by, firstly, making the theoretical part of the examination written, and, secondly, making the whole examination the same for each batch of candidates. This is only what any dispassionate person possessed of common sense will admit should be the case. It is simply moustrons that candidates should be so heavily handicapped by native nervousness, often synonymous with uative modesty, together with the iniquitous difference of examiners.

Why should it be left to the caprice of individual examiners, whose temper is always liable to rude changes, proluced by stupid or uervous candidates, whether a man pass or not? I maintain it should be decided, not in the heat of the mouent, but in coolness and retirement, with the written questions and answers of the candidates before the examiners to be duly weighed and considered. The expenses of the Pharmaceutical Society could be reduced by more than one-half, and the practical utility and fairness of the examinations increased cent. per cent., if the plan of written and uniform examinations that I have indicated above were carried out.

What encouragement is it to other would-be candidates that, out of five fellows who have been steadily working under teachers of acknowledged talent for periods of from 10 to 15 months, only one should be allowed to pass?

I could go back to other examinations and show how fellows really not up to the average—to their own immense astonishment and that of others—have passed while men of much greater attainments have been ignominiously plucked. I speak only to facts that have come under my own personal observation and experience, and can prove all that I affirm regarding the caudidates. I am not a teacher, and never have been.

Also a word re the practical. In Edinburgh usually three subjects are given for analysis—one or two compound and one volumetric—and a report to be furnished in the three hours' morning work; and in Loudou one compound, two simple, and a volumetric, or one compound and two simple, in the same time!

Now, sir, were the question, "Is it possible for young analysts to prove this work in three hours?" put to any body of analysts in the country the auswer assuredly would be in the negative. One compound and one volumetric, or two simple and one volumetric, are amply sufficient to do well in three hours, instead of having to scurry over 50 per cent. more. The examinations are not supposed to be a test of the quickness with which a candidate can guess at results by mere indications, but of his practical applicable knowledge—a point entirely lost sight of by the present Board of Examiners, with one or two notable exceptions.

The 'ast absurd regulation regarding books and papers transcends all the others in "originality." What analytical chemist would think of starting an unknown analysis without his books and notes at hand? What practical objection can there be to them?

Of course the regulation is comprehensible, seeing that it keeps up the fees of the Society by making caudidates "go in" more than once as a rule, while reducing the number of candidates (i.e., the work) to the favoured few who have plenty of time and money to spare.

Reform must come from without. It is useless to suppose that men rendered fat by the iniquitous fees and "systems" of the Society will assist in their own "weeding out" or reduction.

I have no doubt many efforts will be made to discover my name, and rely on your probity and well-known honour to render this public duty harmless to,

216/59. Jupiter Tonans.—Luminous paint is patented, and the process for manufacturing it will be found fully described in Balmain's specification. No one but the patentee or his assigns can make it legally.

The formula for Draper's D'chroic Ink has uever been published. If Jupiter feels that he must have it, he had better apply direct to Mcssrs. Bewley & Draper. An excellent paper on the manufacture of writing ink was published in our last volume, page 439.

Apollo Fat is the name of a variety of vaseline.

IMPORTANT MATTERS.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—A letter under the above heading, signed "A Qualified Chemist," contains two very important matters indeed, viz., the sale of scheduled poisons, and drugs generally, by unqualified men such as grocers and village shopkeepers, and the sale, at cost price, of patent melicines by shoemakers, haberdashers, and general dealers.

The only effectual remedy lies with the Pharmaceutical Society of Great Britain, and hence there is little hope of anything being done. What have the above Society done for the chemists and druggists of England the last 10 or 20 years? They have drawn immense sums from the trade, and especially from the younger branches, and what have they given them in return? Let the Society answer, for I am free to coufess I cannot. Now here are two simple matters where they can help the struggling trade, and confer a lasting boon upon the young men who are leaving Bloomsbury, and entering into business on their own account. Fir t, let the Society vigorously apply the existing law (which has almost become a dead letter) and prosecute in every case where the law is violated and set at defiance by naregistered men; and then, as to patent medicines, let them construct and bring in a small Bill next Parliament to confine the sale of all medicines, patent or otherwise, to the registered chemists of England; and in order to make clear what we mean by medicines, we recommend them to insert the words, "all articles sold as medicine and taken internally shall come within the provisions of the Act," external medicines being excluded; and in order to compensate the Revenue for this change, the future charge for the sale of patent medicines shall be 21, 2s, instead of 5s. as at present fixed. These two matters, so important to the trade, we commend to the earnest and early attention of the Pharmaceutical Society, and think this is the simplest, and, indeed, only effectual remedy for the two great evils that afflict the retail trade.

Yours faithfully,

AN OLD CHEMIST.

The Formula Trade.—In our last we inserted a letter signed "W. C. Hebden," complaining that he had bought a formula, through an advertisement in this journal, which he considered comparatively worthless. We have since had a letter from Mr. T. T. Wade, Bristol, saying that he has hought some which turned out failures, but he wishes to except from his condemnation other recipes which he has purchased from Mr. Brooks, of Louth. Mr. Brooks himself also writes saying he thinks it due to himself to be allowed to state that he has advertised for eleven moutbs, and that though he bas given every purchaser the option of returning he has not had a single recipe returned, nor has he had a single complaint, but on the contrary many testimonials of satisfaction.

215/4. Furniture Polish.—"A Bright Boy" writes:—"Can any experieuced reader favour me with a good, reliable, cheap recipc for furniture polish?"

[We shall he glad to hear what our readers have to say on this matter, and in the meanwhile print the subjoined formula for French-polish Reviver from "Cooley":—

Pale linseed oil 2 pints Strong distilled vinegar $\frac{1}{2}$ pint Spirit of turpentine 1 pint Muriatic acid 1 oz 3

217/17. A. C. G.—Repeated washing is the only way by which sulphuric acid can be removed from the precipitate from Easton's symp. It is always a long and tedious operation. It may be slightly shortened by allowing the filter to drain thoroughly before re-filling it with washwater. The water first poured on the filter becomes a solution of sulphates of greater or less strength. If the filter is re-filled when half the first filling has passed through it the strength of the solution of sulphates will be reduced only a half. If the filter he allowed to drain thoroughly only a small quantity of the original solution will cling to it, and on re-filling the proportion of sulphates in solution will be very greatly reduced. It really saves time to let the filter empty before re-filling it.

217/18. Bradford.—The manufacture and sale of coloured fires comes under the regulations of the Explosives Act, 33 Vict. cap. 17. If yon think of embanking in the trade you had better get the Act and study it carefully. The manufacture of a few ounces on a single occasion would probably not be interfered with.

For removing stains of oil from books see our Jnne number, page 273 "cleaning old engravings."

We helieve about a pound of calcium chloride to a gallon of water will revent the freezing of the latter till a very low temperature is reached. We snppose an ice-cream freezer would enable you to test it.

217/31. Veritas.—If the cough mixture you refer to contains any scheduled poison, the law requires that it should he labelled "Poison," and bear the name and address of the seller. A notion seems to prevail that patent medicines are exempt from these requirements of the Pharmacy Act, In fact, the trade in them is only exempt from the first 15 sections of the Act, and it is the 17th which prescribes the lahelling and other regulations of the sale of poisons. The preparation you name heing recommended for the cure of a disease clearly requires too a patent medicine stamp.

M. R.—Prcservative.—The one you mention very closely resembles powdered borax.

C. J.M.—We know of two dental journals published in this country—the "British Journal of Deutal Science" (Churchill, 6d. fortnightly), and the "Journal of the British Dental Association" (Smith, Elder & Co., 6d. montbly).

214/55. J.P.—We are unable to faruish you with a formula for Whelpton's Pills. Noue has been published where you thought it had. Perhaps some reader can supply the want.

THE CHEMICAL SOCIETY.

Thursday, November 3.

DR. GILBERT in the chair.

The following papers were read:-

"On Citraconic and Mesaconic Ethers and Malic and Fumaric Acids," by W. H. Perkin. The author has carefully investigated the physical properties of the methylic and ethylic ethers of eitr- and mesaconic acids. Dr. Gladstone has also measured their refractive indices. The citraconic ethers boil at a higher temperature than the mesaconic ethers, but their specific gravities, magnetic rotary power, and refractive indices are lower. Only one anhydride can be obtained from maleic and fumaric acids, one from citrand mesaconic acids, and one from α and β coumaric acids. Maleic anhydride can be obtained directly from malic acid by heating with an excess of acetylic chloride.

"On the Action of Potassium Cyanide on Bismuthous Nitrate," by M. M. P. Muir. A puce-coloured body is formed, $\mathrm{Bi_7(CN)_6O_{15}}$. By heating with strong potash $\mathrm{Bi_4O_7}$

is obtained.

"On the Atomic Weight of Dismuth," by M. M. P. Muir. The author has analysed bismuthous chloride and obtained as a mean at w. 210-16, but he is not satisfied with the results, and topes to obtain better numbers by the synthesis of bismuthous icdide.

"Additional Observations on the Halogen Salts of Bis-

muth," by M. M. P. Muir.

"Note on the Action of Sulphuric Acid on Zinc and Tin," by M. M. P. Muir and C. E. Robbs,

"On the Volumetric Estimation of Bismuth in the Form of Oxalate," by M. M. P. Muir and C. E. Robbs.

"Note on the Influence of Water on the Reaction between Potassium Iodide and Chlorine," by M. M. P. Muir and R. Threlfall.

"Laboratory Notes," by M. M. P. Muir. 1. Lecture experiment showing the effect of (a) time, (b) temperature, (c) mass. This consists in adding a solution of bismuth iodide in hydriodie acid to each of three beakers, one containing 100 ec. of cold water, 100 ec. of hot water, and 500 ec. of cold water. 2. The solution of manganese dioxide and manganese ores in hydrochloric acid is much hastened by potassium iodide. 3. A new method of detecting tin in the presence of antimony by boiling with metallic copper, and testing for stannous salt with mercuric chloride. 4. To detect

the haloid acids in presence of nitrous and nitric acids.
"On Suberone," by R. S. Dale and C. Schorlemmer.

"On Sulphonic Acids Derived from Isodinaphthyl," by Watson Smith and T. Takamatsu.

"On Phenylnaphthalene," by Watson Smith and T. Takamatsu.

"On Dimethylmalonic Acid and Dimethylbarbituic Acid," by L. T. Thorne. The author confirms the conclusions arrived at by Conrad and Guthzeit.

Whisky Testimonials.—Dr. Wallace, of Glasgow, sends to the Analyst an application he received from a whisky merchant asking his fee for analysing some of his product and reporting upon it in a style to be "somewhat like" a form of words suggested by the applicant. The certificate was to state that it was "an absolutely pure, old, well-matured, mellow whisky, without a trace of fusel oil, and an excellent and who'esome medicinal and dietetic stimulant." Dr. Wallace quoted his fee, but reminded his correspondent that if the spirit were absolutely pure it would not be whisky, and also that he was not a medical man, and therefore could not testify as to its medicinal qualities. He did not get the order, but he thinks it fair to state that he has tasted the whisky and finds it very good.

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The Times, April 9th, 1881.

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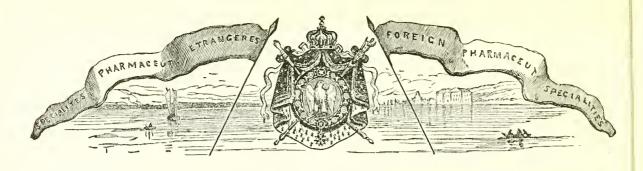
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and tollowing is a list of a low that they have a large state.						
Retail Per doz.	Retail Per doz.	Retail Per doz.	Retail Per doz.			
6/0Alcool de Menthe Ricqles42/	4/6 Capsules Raquin 30/	2/9Grimault's Syrups22/	6/0Rabuteau's Elixir Ferrug48/			
2/9 Ditto ditto21)	4/6 , Mathey Caylus 22/	2/3Guyot's Gondron	3/6 ,, Sirop ,, 27/			
3/6Aubergicr's Syrup27/		11/Laville's Gout Tincture84/				
1/9 ,, Pâté	2/9 ,, Pills25/	11/ ,, ,, Pills84/	5/0Reynal's Bougies42/			
6/6Bay Rum54/		2/3 Papier Fayard				
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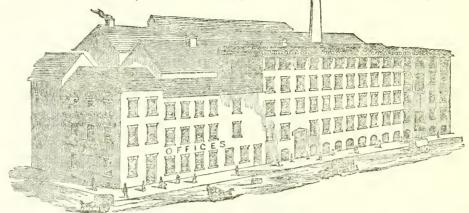
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CAUTIONS IMPORTANT

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD. and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that 'Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital,'

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the

Court would have given Dr. Browne protection.'
LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misre-presenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepre-

sentation of the decision of Vice-Chancellor Wood.

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the Times, November 14th 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the Medical Times, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published

by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation

nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

> From SYMES & Co., Pharmaceutical Chemists, Medical Hall, Simla, January 5, 1880.

To J. T. Davenport, Esq., 33 Great Russell Street, Bloomsbury, London.

Dear Sir,—Have the goodness to furnish us with your best quotations for Dr. J. Collis Browne's Chlorodyne, as, being large buyers, we would much prefer doing business with you direct than through the wholesale houses. We embrace this opportunity of congratulating you upon the wide-spread reputation this justly-esteemed medicine has earned for itself, not only in Hindostan, but all over the East. As reputation this justly-esteemed medicine has earned for itself, not only in Hindostan, but all over the East. As a remedy of general utility, we much question whether a better is imported into the country, and we shall be glad to hear of its finding a place in every Anglo-Indian home. The other brands, we are happy to say, are now relegated to the native bazaars, and, judging from their sale, we fancy their sojourn there will be but evanescent. We could multiply instances ad infinitum of the extraordinary efficacy of Dr. Collis Browne's Chlorodyne in Diarrhœa and Dysentery, Spasms, Cramps, Neuralgia, the Vomiting of Pregnancy, and as a general sedative, that have occurred under our personal observation during many years. In Choleraic Diarrhœa, and even in the more terrible forms of Cholera itself, we have witnessed its surprisingly controlling power. We have never used any other form of this medicine than Collis Browne's, from a firm conviction that it is decidedly the best and also from a sense of duty we are to the profession and the public as we are that it is decidedly the best, and also from a sense of duty we owe to the profession and the public, as we are of opinion that the substitution of any other than Collis Browne's is a deliberate breach of faith on the part of the chemist to prescriber and patient alike.

We are, Sir, faithfully yours, SYMES & Co.,

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THE "TIMES," AUGUST 13th, 1877.

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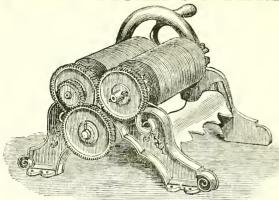
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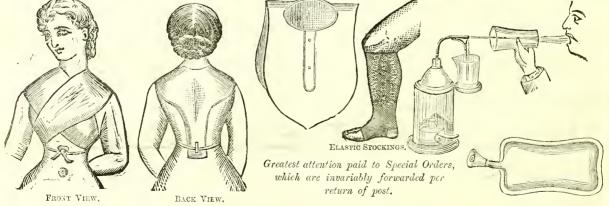
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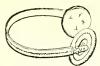


Fig. 1. Patent Single.

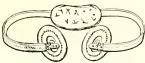


Fig. 2. Patent Double.



FIG. 3. Common Single

FOR

RHEUMATISM,

COUT, ECXEMA,

SKIN, LIVER,

LUMBAGO, SCIATICA, AND

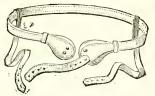


Fig. 4. Common Double.

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Patent Self	-Adjusting	Trusses, Basil and Chamo	is, per do	z (Fig. 1), single			Common		Basil and Cha	mois	per doz.	. (Fig. 3), single	£0 18	0
Ditto	ditto	Basil and Moleskin	11	" "	1 1	3 0	Ditto	ditto	Basil and Mol		**	11 11	1 4	
Ditto	ditto	Roan and Skiver, Silk Sev	vn "	11 . 11 .		3 0	Ditto		Basil and Cha		**	(Fig. 4), double	1 10	0
Ditto	ditto	Basil and Chamois	11	(Fig. 2), double	3 (0 (Ditto	ditto	Basil and Mol		19	11 . 17	1 18	
Ditto	ditto	Basil and Moleskin	11	11 11	3 I	6 6	Scrotal T	russes, Basil and	Chamois or Mo	oleskin	***	each, single	0 3	
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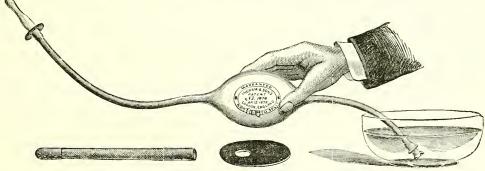
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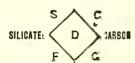
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10 ounce 8 inches 16/6 18/6 20/ 22/ per dozen.
20 , 9 , 17/6 20/ 21/ 23/ 26/6 per dozen.
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25/6 26/6 3 32 ounce $10\frac{1}{2}$ inches 20/4222/ 22/ 26/ 25/6 26/6 30/ 26/6 per dozen.

Size.

Sole Agents: GLASGOW APOTHECARIES' COMPY., Virginia Street, Glasgow.

CARBON FILTERS. SILICATED



Prize Medals-PARIS, 1867. HAVRE, 1869.

DOPTED, IN PREFERENCE TO ALL OTHERS, by A the Admiralty, and used in the General Post Office, the London and Provincial Hospitals, and many Public Establishments in various parts of the World.

SILICATED CARBON FILTER COMPANY.

CHURCH ROAD, BATTERSEA, LONDON.

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For Best Composition, Acid Proof,

MORTARS & PESTLES,

COMPOSITION PILL TILES AND FUNNELS.
EARTHENWARE—COVERED POTS,
CALLIPOTS.

ALL SIZES.

GALLIPOTS, UNIONS.

MEDICINE SPOONS. INVALIDS' FEEDERS.

INFUSION JUGS.

SHOP JARS. BED PANS.

URINALS, ETC., ETC

Special attention to Export Orders. Apply for Price List and Special Quotations to

INSULE, EDWARD S. HANLEY, STAFFORDSHIRE.

EXHIBITION, 1881. FIRST ORDER 0FMERIT AWARDED AT MELBOURNE PRIZE MEDALS, INTERNATIONAL EXHIBITIONS.











LONDON, 1862.

PARIS, 1875. PHILADELPHIA, 1876.

PARIS, 1878.

Of which the following are principal kinds:-

DRUGGISTS' BOTTLES, for Powders, Pills, Acids, Citrate of Magnesia, and other products supplied by Chemical Manufacturers and Wholesale Druggists.

CASTOR OIL, COD LIVER OIL, AND HAIR OIL BOTTLES of various shapes, plain and fancy, with or without stoppers.

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PERFUME BOTTLES, in different sizes and shapes, suitable for both the Wholesale and Retail Trade.

MINERAL WATER BOTTLES for all kinds of Aërated Drinks, of every shape and colour, suitable either for Corks, or the various Patent Stoppers now in use.

WINE AND SPIRIT BOTTLES, of various shapes and sizes, and in suitable colours. ALE and PORTER Bottles in the dark green colour now so much preferred, both for Corks and Barrett & Elers' Screw Stoppers.

CONFECTIONERS' BOTTLES, with or without stoppers, comprising Drops, Barley Sugars, Jellies, Rock, Jam, and Marmalade Jars.

PICKLE, SAUCE, VINEGAR, and Wholesale Oilmen's Bottles in great variety, with or without Stoppers.

We beg to solicit Orders for our New Feeders, at the following prices:-

OUR DARLINGS' BOTTLE."

White Flint Bottles, fitted with Florentine Screw Cap, Black or Brown Fittings, with tube and bottle brushes.



OUR DARLINGS' BOTTLE."

Each bottle in a cardboard box, attractively labelled.

90/- per gross.

BABI GREEN BOTTLES, with boxwood top corks and



white fittings, 38s. per gross.

Ditto, with brown or black fittings, 44s. per gross. WHITE BOTTLES, with boxwood top corks and white fittings, 40s. per gross.

Ditto, with brown or black fittings, 46s. per gross.

Above are put one dozen in a wooden box, or can be supplied, each bottle in a cardboard box, neatly labelled, at 6s. per gross extra.

Spare Bottles-Green, 13s. per gross; White, 15s. per gross

Terms and Discounts forwarded on receipt of application stating quantity required

Large Buye's liberally treated with.

WHITE FLINT BOTTLES, with earthenware and white fittings, with tube and bottle brushes complete, each bottle in a cardboard box, 78s.

Ditto, with brown or black fittings, 84s. per gross. Ditto, with white fittings, bottle of cement for attaching cork strips inside the cap, extra teat, and boxwood cork, 198s, per gross.

Ditto, with brown or black fittings, 120s, per gross.

The 1s. and 1s. 6d. Feeders are fitted with an

arrangement in the rubber tubing for ascertaining the flow of milk, which will be found very useful to all who have charge of infants



LONDON OFFICES AND WAREHOUSES:

WORKS:-THORNHILL LEES AND CONISBORO', YORKSHIRE. Illustrated Price Lists and Samples forwarded on Application.

No Danger. No Chimney. No Smoke.

EXHIBITIONS, NEEDED. AND MELBOURNE STEAM BOILER OR AT SYDNEY HIGHEST AWARDS

Over 6,000 Ottos now at Work.

for Aerated Water Work, Particularly suitable Drug Grinding, Hoisting, &c.

Special List of Engines Please write for and Testimonials. doing this Work,

LONDON HOUSE: 24 Poultry.

LIVERPOOL STORE ROOMS: Basement, Corn Exchange. SIZES (Mominal Horse Power $\frac{1}{2}$ SIZES (Maximum Indicated Horse Power... 1.1

NOTICE. 1 H.P. and 16 H.P. type of Engine. MOMENT'S STARTS AT ROFIERER になっている。

AT ALL PRINCIPAL COLONIAL PORTS. FOUNDRY, MANCHESTER. T.T.MITED CALEDONIAN

AGENCIES WITH STOCK

Over 6,000 Ottos May be run Night and Day. Compared with Steam. No Safety Valves to Watch. Requires no constant ADVANTAGES AS now at Work. Always Ready. Occupies little Space. Vo Extra Insurance. Vo Glands to Pack. attendance. No Heat. No Dust. No Dirt. GROSSIEY BROTHERS MANGRESTER

193 Sauchiehall Street, GLASGOW HOUSE:

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2.26 3.96 5.9 11.57 14.7 23.1 36 to 40 \ OFFERED.

YORK, 1879.

Prize Medals-SYDNEY, 1879.

MELBOURNE, 1880.

ADELAIDE, 1881.

SYPHON

EUGSTER & KOERTGEN, Preprietors,

2 Gresham Buildings, Basinghall Street,

WORKS: LAMBETH, S.E.

LONDON, E.C.



SELTZOGENES.

3 pint size, wire, 13s.; cane, 13s. 6d. 5 ,, ,, ,, 18s.; ,, 8 ,, ,, ,, 30s.; ,, Silverplated top or wire, 5s. extra.

Drop Cups, Measures, &c. LIBERAL DISCOUNT FOR QUANTITIES.

IMPORTANT.

In ordering our Seltzogenes through Agents distinctly state that you require the "Lion and SN Shield" Brand, and see that you get do others inferior are subothersinterior are our apparatuses are stituted. All stamped thus: GUARANTEED PERFECT, and first-class workmanship.

SYPHONS.

Short Levers, 22 6; Long Levers, 24/per dozen net.

WHITE, BLUE, AMBER, OR GREEN BOTTLES. CYLINDRICAL OR OVAL SHAPED.

SILVERPLATED TOPS FROM 8s. PER DOZEN EXTRA. Name stamped on metal tops free for one gross.

Name and Trade Mark engraved on the bottles by the acid process from $1\frac{1}{2}d$. to $2\frac{1}{2}d$. each extra.

Soda Water Machinery.

NEW AND IMPROVED CONTINUOUS APPARATUS With one or two Pumps.

GENERATORS, WASHING VESSELS, GASOMETERS, SYPHON FILLING AND SYRUP DOSING MACHINES.



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HORSLEY & FLOYD,

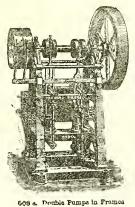
Box and Packing Case Makers and Circular Sawvers. SPENCER SAW MILLS,

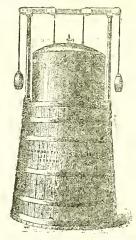
SEBRIGHT ST., HACKNEY ROAD, LONDON, E.

GOLD MEDALS, PARIS, 1878;

MELBOURNE,

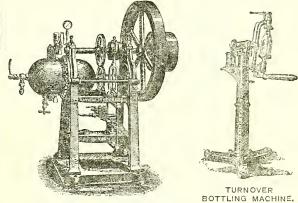
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WATERSODA MACHINERY.

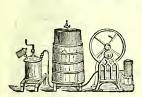


A 1 BRAMAH MACHINE.

Whitecross

Street, London.

BARNET FOSTE FORSTON STREET, SHEPHERDESS WALK, LONDON, N.



Prize Medals-London, 1862, 1873, 1874; Paris, 1867,

1878; Vienna, Philadelphia, Cape, &c. Highest

Award, Sydney, 1879-80.

Our Machines are universally adopted throughout the world for the manufacture of all kinds of Aërated Drinks, whether in bottles, syphons, or counter fountains. There are in England alone over 1,500 factories where our Machinery is in use. They are the simplest, safest, and cheapest for the purpose, and produce a highly-charged gaseous water free from metallic or foreign contamination.

All our Machines have a Gasometer, and it forms a most important necessity where purity of product is required, as in this the gas is expanded and purified; it also removes the possibility of explosion, and avoids the necessity of complication—these we consider of greater importance than the saving of a few inches of floor space.

Our valuable Book of Recipes and Instructions accompanies every Machine, and the most unskilled can at once produce Waters of the highest class.

Sole Manufacturer of the "London-made" Syphon, Fig 2. Sole Agents for Codd's Patent Bottle, Fig. 1. PATENTEES OF THE IMPROVED CORKING MACHINE FOR CHAMPAGNE BOTTLES. ILLUSTRATED CATALOGUE FORWARDED FREE.

SODA-WATER MACHINERY.





SODA WATER MACHINE COMPLETE, WITH RACK.

DAVENPORT'S NOZZLE AND STOPPER is the best Patent for ntilising old Bottles, and converting them into Patents. No Corks or Wire, and saving entire cost in one season. The New Nickel-plated Nozzle makes this the most attractive Patent in use. Trial allowed. Prices lowered. Send for Samples. New Bottles ready fitted for use now supplied. Catalogues of Soda-Water Machines, Ice-Making Machines, Engines, Boilers, Copper Cylinders, Syphons, Seltzogenes, Filters, &c., and all accessories to the Soda-Water Trade.

AGENTS FOR HAYWARD TYLER & CO.'S SODA-WATER MACHINERY.

BARRETT & ELERS' Patent Stoppers in Lamont's Bottles.

"Illustrated Catalogues, of sixty-four pages, post free to all parts of the World.

& CO.. Soda-Water Machinists and General Machinery Agents. DAVENPORT 99N HIGH HOLBORN, LONDON.



The chief features of which are the entire suppression of the Gasometer and all its disadvantages, economy of materials, and saving of labour.

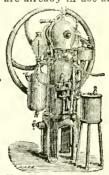
Notwithstanding the short time this Machine has been put before the Public, over 400 Machines are already in use all over the World.



No Gasometer. No danger of Explosion. No skilled labour required. No previous knowledge necessary.

Bottle and Syphon Filling Stand, Syphons, Syrup Pump, and all necessary Appliances. A New and xhaustive Catalogue is now in the press, and will be sent, when ready, on application to

H. FAVARGER (Late MONDOLLOT)



No. 1 Machine, complete. Prices from £28.

The Cheapest Machine. The Most Compact. The Most Simple to Work. Being Entirely Automatical.

"There is no ordinary generator or gasometer in connection with this machine, and therein lies the secret of its advantage over the ordinary English Machines."

—The Mineral Wa'er Trade Recorder and Advocate.

75 TURNMILL STREET, LO CLERKENWELL, E.C.,

PATENT VALLET'S

ROYALTY



The Stoppers are made in six different sizes—Nos. 1, 2, 3, 4, 5, and 6. Nos. 4, 5, and 6 are most suitable for general use, the Bottles adapted to which having sufficient capacity in the mouth to allow a copious flow of the o liquid, whilst Nos. 1, 2, and 3 are specially made for Bottles which have only a small mouth, thus retarding the flow of the liquid, and causing the evaporation of the carbonic acid gas before the Bottle can be emptied.



All Communications to be addressed to

49 Everton Road, L. VALLET,





LIVERPOOL.

FREE.

WILCOCKS' IMPROVED "ORIGINAL" SODA WATER MACHINE

To make 100 Dozen per Day of highly-charged Gaseous Water,

This Machine is on the continuous-process Bramah principle, has a good size Lead Generator, Copper Gas Holder in oak tub, with internal pipes of block tin; Bramah principle Gun-metal Pump in a frame of iron, with Fly-wheel, Crank, and Handles. Instead of the Gun-metal Cylinder or Condenser, with revolving Agitator and Toothed Gear-wheels, we substitute in this Machine a large Copper Condenser of about four times the size, with our Apparatus fitted to the Copper Condenser. We find the Waters are more highly charged with Carbonic Acid Gas by this method than any other way of saturation, and they are perfectly free from metallic contamination. This Machine is also strongly recommended for filling Syphon Bottles, and, if driven by a Motor (either a Gas, Air, Steam, or Water) Engine, the product is about double.

"Original" Wilcocks' Soda Water Machine, to make 100 dozen per day by hand power, with Dial and Water Gauges, Lead Generator, and Copper ... £22:10:0

Packed for Export in extra-strong Iron-bound Cross Battened Packing Case, £3.

"Middlesex" Lever Corking & Filling Machine, for Corked Bottles £5:0:0

Wilcocks' "Eclipse" Filling Machine. for filling the various Patent Internal Stopper Bottles

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Packing Case for each Filling Machine, separately, £1 5s. each. If all three in one Case, £2.

Printed Testimonials and Illustrated Price List on application.

WILCOCKS. BACK STREET.

NOVELTIES IN BOTTLES AND STOPPERS.



GLASS. EBONITE, PORCELAIN, &c. DISC BOTTLE.

WITH NEW PATENT PURE RINGS. SIMPLE, PERFECT, UNIQUE.

Likely to supersede all other Patent Bottles.

The Disc effectually covers the rubber when the bottle is filled.

These Bottles and Ebonite and Porcelain Discs can be supplied cheaper rate than the at a Prepared Glass, as No. 1.

THE SCREW STOPPER & BOTTLE, For Ales, Porter, Cider, and Brewed Beer.

The Screw Stoppers can be attached to the necks of the Bottles by a band of wire and a small chain, if preferred; price about 3s. 6d. extra. See Fig. 4.
When bottling, the Stoppers must be wetted before screwing them in. Screw it gently but firmly home.
They should not be subjected to the action of any strong alkali, or great heat, and are not recommended for bottling spirits at present.

Essential and Indispensable for every Refreshment Room Proprietor, for every Hotel and Public-house, and for every Householder.

Our other, and well-known Stoppers, &c., still supplied as usual.

SAMPLES ON APPLICATION.

OUR ORIGINAL AND WELL-KNOWN STOPPERS HAVE NOW BEEN IN USE FOR YEARS BY UPWARDS OF 1.000



MINERAL WATER MANUFACTURERS AND OTHERS THROUGHOUT THE UNITED KINGDOM AND THE WORLD.

BARRETT & ELERS, 9 Dacre Street, Westminster, LONDON, S.W.



CAUTTON-Circumstances which have come to the knowledge of Andreas Saxlehner, Buda Pest, Sole Proprietor of the Hunyadi János Spring, compel him to WARN the British Public against SPURIOUS IMITATIONS. To secure genuineness, purchasers should see that every bottle has on the LABEL the name of "THE APOLLINARIS COMPANY (LIMITED), London."

AWARDED THE CERTIFICATE OF MERIT AT THE SANITARY EXHIBITION OF GREAT BRITAIN.

SIX DOZEN CASE, which may be assorted, to any Railway Station for Railway 36s., returned Empty allowed 18s.

A Liberal Discount to the Trade, who should send for Sample Case before ordering elsewhere.

ERSOFSHELFANCER



Telegram from Melbourne Exhibition, May 7, 1881.

To Messrs. Samuel Gulliver & Co., Aylesbury.

"TWO FIRST-CLASS AWARDS for your Exhibit, being the Highest Honours obtain-able for Mineral Waters. Special reference being made to the Good Quality." Also Two Sec nd Awards and Honourable

Mention-Five Honours in all.

DISCOVERED BY A MEMBER OF THE ROYAL COLLEGE OF ENGLAND. WHOLESALE AGENTS-

INGRAM & ROYLE, 119 Queen Victoria Street, LONDON, E.C.

This natural Antaeid and Tonic Mineral Water claims to be a most valuable medicinal beverage, in that it possesses the proper proportion of the Carbonates of Magnesia and Iron, which can neither relax nor bind the system, exerting only the tonic and invigorating virtue of Iron and corrective property of Magnesia. The proportion of these most important ingredients is such that it may be taken as ordinary Table Water loss, in short, a simple, effective, safe, and agreeable Machine Chalpbeate. It is particularly recommended by some eminent members of the medical profession for the Gouty, Dutahesis, Anemic, Debility, and Wede Digestion, and when a constitution requires Tonicity and Vigour. Epilepsy and Hempleyia have been materially benefited under its dietetic use, showing it to be of great value in imparting tone to the nervous system. The Water, arrated, may be procured from the above Mineral Water Importers, and on recommendation of medical men Invalids of the upper class are received at the Spring, where the climate is invigorating, and concumption unknown; and in a county where "more than 80 persons have outlived their 100th year within a period of less than 40 years."—Britis History of Norfolk.

Extract from Analytical Report by Professor ATTIFIELD, Ph.D., F.R.S., F.L.C., F.C.S., Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain.

"The 'Shelfanger' is a valuable Magnesson Antacity and the Appeace Water."—JOHN ATTIELD.

From THOS. Coldes, Esg., M.D., M.R.C.P., Lond., Physician to the Royal United Hospital, Bath.

From CHALS, WHITTEY, Esq., M.B., Leanington.

"I am much inclined to believe that the Shelfanger Mineral Water will ere long become a popular beverage with Gouts, Debilitated, and Incomic Intellids."

We have tried the Shelfanger Mineral Water, and find that it possesses all the characteristics claimed for it, and it ever, very agreeable, which cannot be said of most Chalybeates."

Retail Price-6/- per doz. Half Pints, Bottles included.

PROPRIETOR, THE SPA, SHELFANGER, NEAR DISS.

18s. per Dozen Bottles;

22s. per Two Dozen Half Bottles.

Duty paid in London, or f.o.b. Export Ship there.

I have appointed CHARLES KINLOCH & CO., Backchurch Lane, London, E., SOLE AGENTS for England, Germany, France, Italy, Russia, the English Colonies, and America, for the Sale of my Wine.

JULES DELARUE.

Maruil-sur-Ay, France.

ALL ORDERS MUST SENT BE DIRECT

C. KINLOCH & CO.'S WHOLESALE LIST OF WINES AND SPIRITS ON APPLICATION.

NEW AND IMPORTANT DISCOVERY.

FROM PURE JAMAICA GINGER,

The difficulty of using Ginger in the Manufacture of "Ginger Ale," and at the same time having a CLEAR and SPARKLING DRINK, has, after much labour and expense, been thoroughly overcome by

Messrs. HARSTON & CO., of LEEDS,

And they are now able to place before the public a BRIGHT and SPARKLING DRINK, made purely from genuine Ginger Root.



THE ROYAL YORKSHIRE GINGER ALE, From Pure Jamaica Ginger. Has wonderful nourishing properties.

THE ROYAL YORKSHIRE GINGER ALE, From Pure Jamaica Ginger. Restores circulation; is warm and comforting.

THE ROYAL YORKSHIRE GINGER ALE, Prom Pnre Jamaica Ginger. Is Non-intoxicating.

THE ROYAL YORKSHIRE GINGER ALE, From Pure Jamaica Ginger. For railway travelling, driving, or exposure to cold.

ABSOLUTELY PURE.

See Analysis by Drs. A. H HASSALL, M.D., and OTTO HEHNER, F.C.S.

J. H. CUFF'S MINERAL WATERS,

Atkinson St., Deansgate, MANCHESTER.

ESTABLISHED IN 1801.

SODA WATER (ordinary) LEMONADE SODA WATER B.P. SELTZER WATER LITHIA WATER POTASS WATER 15 grs., 20 grs., & 30 grs. (each half-pint)

GINGER ALE GINGER BEER AERATED WATER without alkali QUININE TONIC WATER

LITHIA WITH POTASS WATER, &c., &c., Supplied in ordinary and half-sized bottles and in syphons.

Cuff's Waters are prepared expressly for a High-class Family Trade.

PRICES MOST REASONABLE. LIST APPLICATION. FREE ON

CARRIAGE PAID ON FULL GOODS AND RETURNED EMPTIES.

Cuff's Waters give universal satisfaction to Dealers and Consumers alike. Try them!

A DELICIOUS NON-INTOXICATING AND INVIGORATING

TONIC BEVERAGE.



PRICE, IN HALF CHAMPAGNE

BOTTLES,

6d. 5s.

PER DOZEN.

This SPARKLING, EXHILARATING, and REFRESHING DRINK, while being far more agreeable in bouquet and flavour than the FINEST CHAMPAGNE WINE, is, at the same time, unlike it, FREE from ALCOHOL.

It is strongly recommended both for Juveniles as well as for Adults, as the most Wholesome Stimulating Beverage that has hitherto been introduced, and should be in every household during all seasons of the year.

Samaritan Free Hospital, Lower Seymour Street,

Samaritan Free Hospital, Lower Seymour Street,
Portman Sqnare, London, W.
Dear Sir,—I have tried your Ginger Champagne, which I find to he excellent, and I look npon it as a step in the right direction towards meeting a long-felt want. Our Senior Physician, Dr. Henry Savage, has also tried it, and is much pleased with it. We ought long ago to have had such a beverage, and I believe that a great deal of drinking would thus have been prevented. I wish your effort much success.

I am, dear Sir, yours faithfully,
GEORGE SCUDAMORE, Secretary.
52 Montague Square, London, W.
Sir,—I am able to state that your Ginger Champagne is excellent and most refreshing. It will, I trust, supersede those cheap alcoholic drinks that meet us at many inns and railway stations, and which are often the only drinks to be had. In providing this beverage you have greatly assisted the cause of temperance, and I shall recommend it largely.

C. H. F. ROUTH, M.D.
19 Oxford Terrace, Hyde Park, London, W.
I have tried Hay's Ginger Champagne and like it extremely. I consider it is infinitely superior to the numerous non-alcoholic beverages now so largely advertised. It is an invigorating and refreshing tonic beverage, and, as such, I can confidently recommend it.

W. DOMETT STONE, M.D., Phys. Finsbury Dispensary.
Made by Mr. Hay, of Hull, with his well-known Soluble Essence of JAMAICA GINGER, takes rank as a PURE, wHOLESOME, STIMULATING, and NON-ALCOHOLIC beverage.—British Medical Journal.
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Somuch does it please the palate that one feels inclined to open a second

Medical Press.

So much does it please the palate that one feels inclined to open a second bottle after having drunk the first. This is a beverage which the practitioner can safely recommend.—Medical Times and Gazette.

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CHEMISTS' AERATED MINERAL WATERS ASSOCIATION

Manufacturers of MINERAL WATERS IN GENERAL, AND ALSO THE SPECIALITIES.

A Delicious Lime Fruit Beverage, Free from a Musty Flavour.

Of Chemists, 5.6 and 8/6 per dozen.

Contains no Iron, no Phosphorus, but FRUIT AND VEGETABLE PRODUCTS ONLY.



THE CHEMISTS ARRATED & MINERAL WATERS ASSOCIATION LIMITED. Of Chemists, 5:6 and 8.6 per dozen.

WATERS BEING OF FIRST QUALITY, A TRIAL IS SOLICITED. €fices and Factories—45 Gifford Street, and 112 Pembroke Street, Caledonian Road, London; and Harrogate.

SBUR BROWN'S

MANCHESTER

ATERS.

PURE SODA, SELTZER, POTASH, LITHIA, &c., LEMONADE.

GINGER QUININE ALE. AND TONIC.

Prepared and Bottled specially for Export, and warranted to keep well.

Manufactured with the utmost care and by improved machinery, these productions are recommended for purity and excellence of quality by many leading members of the Medical Profession, and have for many years had a preference by the public; the flavour of the Lemonade and Ginger Ale being procured from the fresh Fruit and Finest Jamaica Ginger, they may be relied upon as furnishing delicious and satisfactory beverages, either for general use or specially for invalids.

The Soda Water is absolutely free from any metallic impregnation, and being by improved machinery highly charged with Carbonic Acid Gas, and each bottle containing a definite and unvarying proportion of Pure Carbonate of Soda, J. & B. have every confidence in inviting a trial from those who have not already patronised them.

The Seltzer, Potash, and Lithia Waters are prepared with the utmost exactitude and the

purest ingredients.

The New Quinine Tonic furnishes a pleasant form for the administration of a most valuable restorative, and is refreshing and agreeable.

Ginger Ale (Aromatic) of superior quality, and strongly recommended as a Non-Alcoholic and warm stimulant beverage.

N.B.—Every Bottle is protected by a distinctive Label, with Name and Trade Mark, and each Cork is branded.

Counter Bills and Analytical Reports, with Agents' Names and Addresses, supplied when requested.

A CERTIFICATE OF MERIT awarded by the British Sanitary Institute of Great Britain, after a deferred PHACTICAL TRIAL AND EXAMINATION, July 4th,

CERTIFICATE OF MERIT, for superiority of quality, as swarded to Jewsbury & Brown at the Exhibition of anitary Appliances, at Owens College, Manchester, on the occasion of the Meeting of the British Medical was awarded Banitary

W. J. BUSH & CO.,

Distillers and Importers of

Essential Oils & Fruit Essences,

SPECIALITIES FOR AERATED WATER AND GORDIAL MANUFACTURERS,

ESSENCE LEMON.

EXTRA SUPER QUALITY,

The only pure Essence imported, made at our Works at Sicily.

ESSENCE GINGER ALE,

For Winter Drinks.

TONIC ESSENCE, FOR BITTER WATER.

Soluble Essence Lemon.

SOLUBLE ESSENCE GINGER.
SOLUBLE ESSENCE OF PEPPERMINT.

BEWARE OF SPURIOUS IMITATIONS.

MW.J.B.& Co. caution the Trade against the so-called Soluble Essences now so frequently offered for sale, which are nothing more than mere Tinctures; and although offered at lower prices, cost 5 or 6 times as much in use, whilst imparting a strong medicated flavour. W. J. B. & Co. further beg to inform their friends that Aerated Drinks-as Pale Ale, Horehound Beer, &c.—made from their Soluble Essences are exempt from Excise regulations.

NONE OTHERS ARE GENUINE.

CAUTION.

W. J. BUSH & CO. regret having to caution the trade against spurious imitations of this article, most of which being incredible trash.

GUM EXTRACT

(French Cream),

PROTECTED BY ROYAL LETTERS PATENT,
For producing a Permanent Head of Creamy Richness on
Ginger Beer, Ginger Ale, Lemonade, and other Aërated
Beverages; also on Beers, Ciders, Wines, &c.

2s. 6d. per 1b.

TO MAKERS AND VENDORS OF EFFERVESCING DRINKS, AND TO THE PUBLIC GENERALLY.

IN the High Court of Justice—Chancery Division—on Thursday, June 10, 1880, before Vice-Chancellor Sir C. Hall, an application was made in the action of Bush v. Young to commit the defendant to prison for disobeying an injunction whereby he had been restrained from selling, imparting, or publishing a recipe, which is an infringement of a certain patent known as "Gum Extract," the property of the plaintiff, which is used in the mineral water trade for giving a creamy head or foam to ginger beer and other beverages; the defendant having published and sold a recipe for the preparation of the same compound under the name of "Compound Fluid of Saphacanium," to be used for the same purpose. The defendant resisted and the ground that the bark used by him was not the same as that used by the plaintiff, being known as "Panama Bark."

The plaintiff, however, proved that this was in fact the same, and

The plaintiff, however, proved that this was in fact the same, and the Court granted the injunction. The defendant also threatened to publish the recipe unless it were bought up by the plaintiff.

His lordship made an order that in default of defendant paying the costs, he should stand committed to prison.

All persons infringing the above patent will be proceeded against, and those who give information of such infringement will be liberally rewarded.

W. J. BUSH & CO.,

20-23 Artillery Lane, Bishopsgate, London, E.

HAY'S

SOLUBLE ESSENCE JAMAICA GINGER

(GUARANTEED PURE AND FREE FROM CAPSICUM)

TRADE PRICE, 5s. per lb.; 12 lbs. and urwards, 4s. 61.

Highly adapted for the manufacture of Transparent Aërated Waters, and for all Dietetic, Medicinal, and Pharmaceutical Purposes.

HONOURABLE MENTION,
INTERNATIONAL FOOD EXHIBITION
AGRICULTURAL HALL, LONDON,
OCTOBER, 1980.

TESTIMONIALS.

"DEAR SIR,—I think you should make it generally known that your Essence, in water, is the very best vehicle possible for Cod Liver Oil. It conceals its flavour, prevents caused and cructarious, and aids its digestion. "DANIEL HOOPER, M.D."

"Spring Grove, Upper Norwood, London, S.E.
"Dear Sir,—I have pleasure in testifying to the excellence of your Soluble Essence of Jamaica Ginger. You nave fully overcome the difficulty usually experienced in preserving ginger in combination and in solution with iron tonic mixtures.

EDWARD HAUGHTON, M.D."



THE COMPOUND ESSENCE

(GUARANTEED PURE AND FREE FROM CAPSICUM).
This Essence imparts with the GINGER a PECULIARLY FINE FRUITY
FLAVOUR and AROMA.

TRADE PRICE, 5s.6d. per lb.; 12 lbs. and upwards, 5s.

THE COMPOUND FORTIFIED ESSENCE

Specially adapted for the Manufacture of the FINEST

GINGER ALE.

This Essence imparts the fullest amount of PUNGENCY with the FINE GINGER AROMA and FRUITY FLAVOURS of the LAST-MENTIONED ESSENCE.

TRADE PRICE, 5s. 6d. per lb.; 12 lbs. and upwards, 5s.

HAY'S GINGER ALE ESSENCE

HIGHLY CONCENTRATED.

This Essence is a complete Bouquet of the finest Ginger, Lemon, and other flavours, in a highly concentrated state.

TRADE PRICE, 9s. per lb.; 12 lbs. and upwards, 8s. 6d.

GINGER ALE EXTRACT

Supplies Pungency, Aroma, Colouring and Flavouring.

Price 4s. 6d. per lb.; 12 lbs. and upwards, 4s.

PREPARED BY

W. HAY, MANUFACTURING CHEMIST,

4 REGENT'S TERRACE, HULL.

AGENTS,

Messrs. HEARON, SQUIRE & FRANCIS, 5 COLEMAN STREET, LONDON, E.C.

NON-ALCOHOLIC.

Extract from Analytical Report by F. P. PERKINS, Esq., Public Analyst to the City of Exeter.

"A carefully-prepared beverage. . . . Pure, wholesome, and exhilarating. . . . The mineral matter held in solution is chiefly in the form of hypophosphites, of which each bottle contains about one grain."

PHOSPHODON

Extract from a Letter from Mr. TURNER, the West Clifton Pharmacy, Clifton. (ENTIRELY UNSOLICITED.)

". . . . Will thank you to send me two gross of Phosphodone. I must congratulate you upon bringing out one of the finest drinks that was ever offered to the public, and for which you deserve the very ready sale which it has acquired. I cannot speak too highly of its medicinal virtues and its delicious taste; and all my customers who have once tried it have it again, and in every case speak in very eulogistic terms, and prefer it to all other similar beverages."

PHOSPHODONE

Is being regularly and constantly Shipped to the Colonies with the most perfectly satisfactory results, both for the excellent condition which it maintains throughout the passage, and for its very ready acceptance by persons of high position and influence.

A Certificate of Merit has been awarded for Skinner's Mineral Waters by the Sanitary Institute of Great Britain, with the congratulations of the Right Honourable President, Earl Fortescue in making the presentation.

G. J. SYMONS, F.R.S., Registrar.

Dr. H. C. BARTLETT, F.C.S., Dr. W. H. CORFIELD, M.B., F.C.S., Exhibition, 1880. Professor F. de CHAUMONT, M.D., F.R.S., Chairman of Council.

The Medical Profession and other correspondents may be furnished with the Alkaline Strength of the Mineral Waters, and other important information, as well as detailed Analyses, Medical Commendation, Press Notices, Testimonials, and Scientific Authorities. See Analyses by Professors Wanklyn, Heisch, &c.

WHOLESALE AGENTS-

Barclay & Sons, 95 Farringdon Street. EDWARDS & Sons, 157 Queen Victoria St. Evans, Gadd & Co., Exeter.

INGRAM & ROYLE, 119 Queen Victoria St. | Newbery & Sons, King Edward Street. Bath Bridge, Bristol. Lynch & Co., Aldersgate Street.

Sanger & Sons, 150 Oxford Street. Sutton & Co., Bow Churchyard.

Retailed at 5/6 per dozen, Champagne Pints (bottles included).

Chemists may obtain advantageous terms from the Wholesale Agents.

G. H. SKINNER, ST. KERRIAN WORKS, EXETER. PROPRIETOR:

EVERAGE. FILTCIC

The BRITISH MEDICAL JOURNAL says:-

"We can confidently recommend it to the attention of physicians and others who are occasionally at a loss what to direct their patients to take when parched by feverish thirst or depressed by exhausting ailments--notably in cases where alcoholic stimulants would be prejudicial. We feel that it would be found exceedingly useful in mitigating the discomfort ofttimes experienced by those suffering from the thirst, loss of appetite, and general malaise connected with the last stage of phthisis and chronic bronchitis. We would also, from our observations and experience, advise its introduction into clubs, taverns, and places of public amusement, where it would judiciously supersede vinous and alcoholic stimulants, seeing that it contains, as its name implies, life-giving ingredients in a form easily assimilated."

NERVE BRAIN AND TONIC.

The LANCET says:—"Zoedone contains the soluble phosphates of lime, iron, soda, and potash, in medicinal quantities. Very efficient and pleasant."

The MEDICAL PRESS AND CIRCULAR says: -- "Is commendable equally for the style in which it is put up and the delicate flavour which it possesses, and also on account of its special merits as a nervine tonic."

DR. NORMAN KERR says: -- I rejoice to see the continued growing favour of the public for your elegant and fascinating beverage, which I prescribe very extensively as a medicinal tonic, as well as recommend constantly as a pleasant social drink.

DR. LLEWELYN THOMAS says:—To my taste ZOEDONE is by far the pleasantest and most agreeable of any of the aërated waters now before the public. It is peculiarly suited to those engaged in public speaking or singing, as from its tonic and stimulating properties it obviates any recourse to alcohol when feeling exhausted and thirsty. It is quite free from the mawkish, insipid taste of so many waters which require the addition of wine or spirits to make them palatable.

Customers supplied with Pamphlets, Circulars, and Cards for distribution, and Handsome Show Cards and Tablets for display.

E is admirably adapted for hot climates. Application for Trade Terms should be accompanied by Business Card.

On and after October 8th, 1881, ZOEDONE will be sent carriage paid to every Railway Station in England, and to Edinburgh, Glasgow, Belfast, Cork, and Dublin.

WHOLESALE AGENTS:-

London-Allen & Hanburys.

Barclay & Sons.

W. Best & Sons.

Farries.

Corbyn, Stacey & Co.

Edwards & Sons.

Evans, Lescher & Evans.

Hearon, Squire & Francis. Ingram & Royle.

Lynch & Co.

S. Maw, Son & Thompson.

F. Newbery & Sons.

Probyn & Co.

Savory & Moore.

Wright, Layman & Umney.

ABERDEEN—W. Paterson & Sons.

BELFAST-Grattan & Co.

Clarke & McMullen.

Berwick—W. Graham Carr & Son.
Birmingham—Southall Bros. & Barclay.
"Phillip Harris & Co.

W. Best & Sons.

Burgoyne, Burbidges, Cyriax & Bournemouth—Leverett & Frye.

Bradford-Harrison, Parkinson & Co. BRISTOL-Ferris & Co.

CHELTENHAM-Joseph James.

CORK—W. & H. Goulding. ,, T. R. Lester.

COVENTRY-Wyleys & Co.

Douglas—James Kissack.
Dublin—Hamilton, Long & Co.

Johnson & Oldham.

A. & R. Thwaites & Co.

EDINBURGH—Duncan, Flockhart & Co.
" John Mackay & Co.

Exerem-Evans, Gadd & Co. GLASGOW—The Glasgow Apothecaries' Co.

Hull-Lofthouse & Saltmer. Kendal-Severs & Bateson.

LANCASTER-W. H. Bagnall & Co. LEEDS—Goodall, Backhouse & Co. Leicester-John Richardson & Co.

LIVERPOOL-Clay, Dod & Case.

Evans, Sons & Co. Raimes & Co.

R. Sumner & Co. Clay & Abraham.

Symes & Co.

MANCHESTER-H. G. Crews.

James Smith & Co. James Woolley, Sons & Co.

NEWCASTLE-ON-TYNE-Brady & Martin. Mawson & Swan.

NORTHAMPTON-Frederick Kirby. PLYMOUTH-Wills, Son & Box.

SOUTHAMPTON—Randall, Sloper & Co. York-Henry J. Pratt.

" Raimes & Co.

Retail Agents whose names are not on the published list should communicate with the Manager.

PATENTEE-DAVID JOHNSON, F.C.S.

GENERAL MANAGER-JOHN MOSS, F.I.C., F.C.S

Manufacturers—THE ZOEDONE COMPANY (Lim.), Wrexham, North Wales.

ZOEDONE BUREAU FOR FRANCE: 7 RUE ROYALE, PARIS. ZOEDONE BUREAU FOR BELGIUM: 2 RUE DE LOXUM, BRUSSELS.

NOTE.-ALL orders for the Company must be sent to Wrexham.

FOREIGN MINERAL WATERS.

FOREIGN LIQUEURS.
FOREIGN WINES.
FOREIGN SPIRITS OF EVERY DESCRIPTION.
ANGOSTURA BITTERS.

APPLY TO

JAMES SMITH & COMPANY, IMPORTERS,

LIVERPOOL: 9 LORD STREET.

FOREIGN

Mineral Waters and Zoedone.

FREDERICKSHALL (5 Cases, 8d. per Case lees, 24/6 Case, 30 bot.; 54/ Case, 50 bot.; 54/Case, 50 bot.; 54/Case, 50 2-bot. 24/ Case, 50 bot.; 36/6 Mpr., 100 2-bot. Hampers free.

HUNYADI JANOS (10 Cases. 3/- and 5/- less), 30/- Case, 25 bts.; 50/- Case, 50 2-bts.

30/- Case	1, 20 DI	LB.; OU,	- CE	se, ou	Z-DIR			
SELTZER	***				Hpr.			
79	***	***		15/-	Hpr.	, 50	₫-bt	в.
PULLNA	***	***			Case,			
22	***	***		30/-	Case,	50	∮-bt	8.
VICHY	***	***			51	50	bts.	
**		***		27/-	11	50	}-bt	θ.
CARLSBAI)			37/-	11	50	bte.	
KISSENGE	N	***		42/6	11	50	22	
SCHWALL	BAC	H		27/6	11	50	11	
HOMBURG				37/6	11	50	11	
WILDUNG	EN			40/-	11	53	11	
CARLSBAI	SA	LTS,	1-Bo	te., 2	0/- p	er	doz.	

HOMBURG 37/6 ,, 50 ,, WILDUNGEN 40/- ,, 50 ,, CARLSBAD SALTS, 2-Bots., 20/- per doz.; 2-Bots., 40/- per doz.; Bot., 89/- per doz.; ZOEDONE, 5/- per doz., 6-doz. Cases (if 5 Cases, 2d., 10 Cases, 3d., 20 Cases, 4d. per doz. less).



Norway Block Ice.

ORIGINAL BLOCKS ... 1/9 per cw 1 cwt. to 2 cwts. ... 2/6 ,, 2 cwt. to 1 cwt. 3d. per lb.

Packing and Mate for Original Blocks free 3d. each allowed for Mate if returned. Present Season's Ice specially fine and extra thick. Low quotations given for quantities taken from vessels while discharging.

PRINTED DIRECTIONS for STORING ICE sent free on application.

W. B. HARRISON, IMPORTER OF ICE AND MINERAL WATERS,

6 Bridge Street, Sunderland.

Caution

W. A. ROSS, the Original Patentee and Maker of The Celebrated Belfast Ginger Ale, cautions the Public that the "GENUINE" can only be had at



NAME ON CORK, CAPSULE, AND LABEL REGISTERED.

EXPORT ORDERS HAVE SPECIAL ATTENTION

T. & F. J. TAYLOR'S



AËRATED WATERS

Newport Pagnel.

SODA, POTASH, SELTZER, AËRATED (without Alkali), and LITHIA WATERS,

LEMONADE AND GINGER ALE.

Each Bottle is protected by a Label bearing the Signature of the Firm.

Purity and Excellence of the Water certified by Analysis by Professor Attrield, Ph.D., F.C.S.

FOR SUMMER.

RASPBERRY STRAWBERRY LIME FRUIT BLACK CURRANT LEMON, GRANGE JARGONELLE PEAR PINE APPLE

In Bottles, 1/9, Half Bottles, 1/-



FOR WINTER.

AROMATIC BLACK CURRANT 3 GINGERETTE GINGER LEMON PEPPERMINT CLOVE WINTER PUNCH LIME FRUIT CORDIAL

In Bottles, 1/9, Half Bottles, 1/-

By the simple addition of two table-spoonfuls of these Syrups to a tumblerful of hot or cold water, most wholesome and refreshing drinks are inmediately prepared, as pleasant to the taste as they are invigorating to the system. For Gazogenes and the Syphon Soda Water Bottles they are admirably adapted. Put into a tumbler a large spoonful of any of the Syrups, and fill it up with the Gaseous Water. Largely used for flavouring Puddings, Jellies, Custards, and Blanc-Mange, and are specially suitable for the Sick Room, Pic-nic, Weddings, Christmas and Birthday Parties, &c., &c.

Sole Manufacturer-W. BECKETT, Heywood, MANCHESTER.

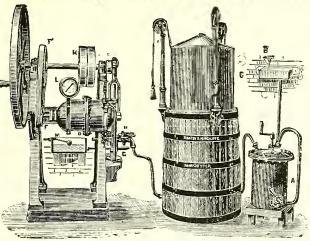
Wholesale Agents-Borclay & Sons; Sanger & Sons; Edwards & Sons; Sutton & Co., &c., &c.

PLANTS. WATER SODA

For the convenience of parties about to commence in the trade, and small manufacturers, we have made arrangements with Messrs. Galloway to supply a smaller kind of their well-known Soda Water Machinery, complete with or without Gas Holder, Generator, and Bottling Rack, to fill any kind of patent bottle, or for cork bottles only. The Machines are made to work either by hand or power, and are adapted for any elimate.

Intending purchasers should compare prices and workmanship with those of other makers.

Full Particulars & Descriptive Circular will be forwarded on application.



No. 1 Plant, complete, makes 400 dozen per day, and is fitted with 13-in. Pump and 2-gallon Cylinder, and also includes Gasometer and Generator.

Price £52 10s. No extras.

No. 2 Plant, complete, makes 600 dozen per day, and is fitted with 24 in. pump and 4-gallon Cylinder, and also includes Gasometer and Generator.

Price £63. No extras.

A Bottling Rack, for filling either patent bottles or cork, is supplied at an extra eost of £10 10s.

Factories fitted complete, and all accessories supplied. Instructions given.

Any portion of this Plant is sold separately. Prices on application.

BRATBY & HINCHLIFFE, Pott Street, ANCOATS, MANCHESTER.

THE "DESIDERATUM" MIXING MACHINE

P. H. BRACHER &

WINCANTON. HIGH STREET,

FROM ZEALAND.

WILCOCKS, SODA WATER MACHINIST, BACK STREET. BATH.

From THOMSON & CO.,

Steam Aërated Water Works,
Bond and Crawford Streets, DUNEDIN; CHELMER STREET, OMARU; and Spit, NAPIER.

To Mr. N. G. WILCOCKS.

Engineer,

BATH.

March 25th, 1881.

"Dear Sir,—We wish to convey to you, unsolicited, our appreciation and entire satisfaction with the Double Soda Water Pumps (large size) made by you and forwarded to us by Edgar Breffit & Co., London and Yorkshire. These reached Dunedin, per ship 'Zealandia,' in 1880, in splendid order and condition. We have had them working constantly six or seven months now, and for cheapness, durability and finish, combined with their strong carbonating power, we have seen nothing to equal them in 20 years' practical "THOMSON & CO." experience. "We are, dear Sir, yours faithfully,

Mr. Wilcocks can give numerous references to Pharmaceutical Chemists and others (which are kindly permitted) who use his make Machines, and will forward his Illustrated Price List, post free, on application.

Steam Engine and Boiler supplied for SOUTH AFRICA.

London, May, 1881. London, May, 1881.

Tear Sir,—We are glad to inform you that the Steam Engine and Boller, shipped by us to the Cape, in December last, still works well. Our client, in a letter just to hand, writes:—"You will be pleased to hear that the little Engine is still working beautifully; it is certainly a vast improvement on the hand power." Faithfully yours,

EURGOYNE, BURBINGES, CYRIAX & FARRIES.

To Mr. N. G. Wilcocks, Engineer Park

To Mr. N. G. Wilcocks, Engineer, Bath.

pro J. W. J. B.

Dear Sir,—We have been using your "Eclipse" Filling Machine this eek. We find that it can fill the bottles very well.—Yours faithfully, week. We find that it Mr .Wilcocks, Bath. I. LAMBERT.

Anerley Road, Norwood, S.E., London, April 16th, 1881.

Dear Sir,—I have now had your Machinery in use for over six months, and as far as I can judge from workmanship is equal to the London makers, and at least 20 per cent. less in cost. I shall be pleased to show my plant to anyone you like to refer to me.

Yours faithfully, Chamister Peth.

Mr. N. G. Wilcocks, Bath. J. G. PREBBLE, Chemist.

By Appointment.—W. E. STOKES, Chemist, Brompton, Kent, Established 1812, April, 1881. "Eclipse" Soda Filling Machine to hand, have tried it in two or three different Patent Bottles, and appears to answer admirably well.

Bell Street, off Pole Street. From James Lund's Aërated and Mineral Water Manufactory.

Dear Sir,—I have the pleasure to inform you that the Boiler, Engine and Sooa Water Machinery, &c., I got from you give one every satisfaction, it works excellently and turns out first-class Aërated and Mineral Waters.

To Mr. N. G. Wilcocks,
Soda Water Machinist, Bath.

JAMES LUND.

SILICATED CARBON FILTERS.

SYPHON FILTERS FOR TRAVELLERS

By means of these Filters pure and perfectly wholesome water may be drunk from any pond or stream by simply immersing the Filter therein and drawing the water through the tube by suction.

Each of these portable Filters may be



used as a Syphon by placing it in a vessel of water, then drawing the water by the mouth, and allowing the flexible tube to hang over the side below the Filter. When once set in operation their action is con-

tinnons

They are readily cleaned from sedimentary matter by merely blowing through the tube, and brushing the surface of the

A.—Pocket Filter, 2½ inches diameter, in porcelain, with glass s.	d.
	6
	0
Ditto, ,, with silver-plated tap 7	0
C.—Emigrant's, 5 inches diameter, with silver-plated tap 12	0
GPocket Filter, for carrying over shoulder, as supplied to the	
Forces in Abyssinia and in Zululand, and to the Ashantee	
Expedition 3	6
HDitto, nickel-plated, designed by Major Fraser, R.E., and specially	
recommended by the Horse Guards for Officers' kits 5	0



DINING-ROOM FILTER.

No. 22.

MADE IN MARBLED CHINA. Size A holds about two gallons; size B. five gallons.

PRICES.										
A					• •			• •		35s.
В										80s.
Α,	with	Ice	Com	part	men	t				42s.
(New Patent.)										
В,	with	Ice								100s.
(New Patent.)										
71.0	Tara	0101	(P)	100	nacio	7720	adan	tod :	For	Motolo

Refreshment Rooms, Luncheon Bars, &c.

TABLE FILTER, NO. 24.

Made of stout glass, in 1, 2, and 3 pint sizes, the filtering medium being securely fitted into the bell-funnel, so that it is not liable to become loose, or to allow unfiltered water



to pass. This Filter is peculiarly suited for the Bedroom and for Table use, affording a ready and simple means of obtaining at any time freshly-purified water.

PRICES.

O, 2s. 6d.; A, 4s.: B, 5s. 6d. Engraved Vine Pattern—O, 3s. 6d.; A, 5s. 6d.; B, 7s. 6d.

POROUS TERRA COTTA FILTER, NO. 29

Shape of this Filter as Fig. No. 24. O, 2s. 6d.; A, 4s.; B, 5s. 6d.

CARBON BLOCKS.

 $2 \text{ in., 1s. 6d.; } 2\frac{1}{4} \text{ in., 2s. 6d.; } 2\frac{3}{4} \text{ in., 3s.; } 3\frac{1}{2} \text{ in., 4s.; } 4\frac{3}{4} \text{ in., 5s. 6d. ea.}$ SPECIAL QUOTATIONS FOR QUANTITIES.

REFRIGERATOR FILTER, NO. 25.

Made in Porous Terra-Cotta Ware,

Which acts with remarkable power as a cooler, and renders this Filter invaluable, especially in Tropical Climates, AFFORDING A

COOL DRAUGHT OF PURE WATER.

Price, with Silver-plated Tap Ditto, ditto, with Ice Compartment..... Capacity Two Gallons. .. 31s. 6d. 42s. 0d.

Specially adapted for Tropical Climates.



SILICATED CARBON (Regd.) ASCENSION FILTERS.



NO. 38

PRICES:

efficient

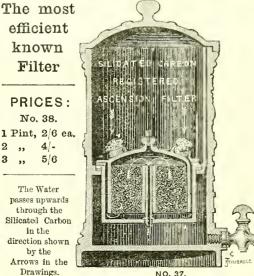
known

Filter

No. 38.

1 Pint, 2/6 ea. 4/-5/6

The Water passes unwards through the Silicated Carbon in the direction shown by the Arrows in the Drawings.



and Domestic Use.

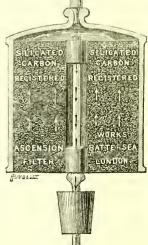
for Table

PRICES:

No. 37. 1 Gal., 18/- ea. ,, 26/-38/-

The inner blocks being movable, by attaching an indiarubber tube they can be converted into Pocket or Travelling

Filters.



SECTION OF NO. 38.

WRITE FOR FULL LISTS TO THE

SILICATED CARBON FILTER CO., CHURCH ROAD, BATTERSEA, LONDON.

Retailed HYR ILLINGS each. at

Designed by MAJOR FRASER, of the

ROYAL ENGINEERS.

especially

for Officers' Kits.

Weighs only 8 ounces.



No. 20 H.

by the Authorities at the Horse Guards, and has been largely used in the Afghan and Zulu Expeditions.

It has been approved

Sample sent free by Post on receipt of FOUR SHILLINGS.

DOMESTIC

Made in cream-coloured Stoneware, fitted with the Silicated Carbon Media, complete with Cover and Silver-plated Tap.

All sizes of this pattern can now be had with Ice Compartment, which renders this Filter the most perfect of Refrigerators.



FILTER, NO. 27.

PRICES.

With Ice Compartment.

No. O, capacity & gallon 10s. 6d.

No. A, 14s. 6d. ... 17s. 6d. No. B, 2 21s. 0d. ... 25s. 0d

No. C. 4 32s. 0d. ... 36s. 0d.

No. D. 6 42s. 0d. ... 48s. 0d

8 No. E, 52s. 0d. ... 60s. 0d.

No. F, 1270s. 0d. ... 80s. 0d.

MAIN SUPPLY TER,

SPECIALLY ADAPTED FOR Mansions, Schools, Hospitals, Public Institutions, Breweries, Distilleries, Soda Water Manufactories, Dye Works,

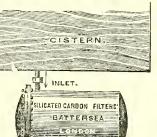
And all other Establishments where large quantities of

PURE WATER

Are required.

The ordinary Sizes kept in Stock are as follows :-A, 1-inch or 2-inch pipe £6 6s. B 1-inch pipe

C, 11-inch, 11-inch pipe £15 15s. D, 2-inch pipe £26 5s.



This Filter is extremely simple in construction, and can be either connected with a Cistern or attached to the Main Service Pipe. It requires no attention beyond an occasional opening of the Cleansing Tap, and will deliver a supply of purified water at a rate of 50 to 1,000 gallons per hour, according to size.

Special Contracts entered into for Large Works, Institutions. &c., &c.,

FOR PURIFYING THE WHOLE OF THE WATER SUPPLY OF A BUILDING BEFORE USE. Ensuring Rapid and Perfect Filtration, at either High or Low Pressure.

CLEANING TAP

EXTERIOR VIEW

SILICATED CARBON FILTER CO., CHURCH ROAD, BATTERSEA, LONDON.

"The Best Extant."

The enormous sale last year of this old-established article, and the few specimens of testimonials below, stamp it as undoubtedly "the best extant." It is very neatly and very carefully put up throughout, and is indeed a most satisfactory article in



Thirty-five years Reputation.

every respect, proof of which lies in the fact of its having - although not constantly advertised - steadily maintained its reputation as such, ever since its introduction to the trade and the public, now about thirty-five years

"CANNOT BE EXCELLED."

From Mr. Smith, Chemist, Glasgow:—"I have not kept any other Vermin Killer' than yours for the last four years. It is the best I ever sold." From Mr. Geo. Eagle, Merrick ville, Sydney, Australia, to Mr. Mitchell, Druggist, Pitt Street, Sydney:—"Sir,—I promised to let you know how 'Humter's Vermin Destroyer' acted. Its effect was wonderful; in one

'Hunter's Vermin Destroyer' acted. Its effect was wonderful; in one night it destroyed all the rats and mice about my house, which was swarmed with them.''

From Mr. A. Billington, Chemist, Wakefield: August 28,1878:—"Dear Sir,—Please send me a few of your Vermin Killer Registers. I can bear testimony to the deadly effect of your 'Killer,' having one night laid in my warehouse the contents of a 2d. packet, and found in the morning no fewer than forty dead mice."

TESTIMONIALS. VIDE

From Messrs. P. Smith & Co., Chemists, Runcorn, October, 1830.—
"In our opinion your 'Destroyer' is the best extant."
From Mr. James Froud, Chemist, Dorchester:—"Your poison succeeds to admiration. It is as effective as an infernal machine."
From Mr. Jas. Thompson, Low Hesket, near Carlisle, to Mr. R. T. Pattinson, Chemist, Carlisle:—"Sir.—You can with condence recommend 'Hunter's Vermin Destroyer.' It is the best thing I ever used, having often cleared stack-yards of both rats and mice in a day or two."
From Mr. Edward Thornton, Chemist, Lyme Regis:—"I can bear testimony to the efficacy of your 'Killer.' Parties who have purchased it of me say that it is the best they have tried. Mice are rapidly destroyed by it, and it quite answers the description you have given of it."

Kept in Stock by all the Wholesale Houses in the Trade throughout the United Kingdom. Vide Trade Lists, &c.

LABORATORY—WESTGATE & UNION STREET, DEWSBURY, ENGLAND.



Has an immense Sale, and wherever introduced never fails to give satisfaction.—Mice appear attracted to it as by magic, ext it readily, tumble over, and die on the spot.

Vermin may be cleared at once, either from Stacks, Houses, or Ships.

TESTIMONIALS.—Thous and smight be published.

From Mr. Thomas Colton, Agent for Selby.—A friend of mine purchased a Packet of your Vermin Killer last night, doubting its efficacy to-day he called in to say that he had found fifteen dead unice, and had only used part of a packet.—From Mr. EDWARD STREPY, Flemington Mills.—I duly received by post the Packet of your Vermin Killer, and found it as represented in your advertisement. It specified yeteroyed all the mice in my granary. I enclose 2s, for two more Packets.—Leeds, November 6th, 1857.—I have tried Battler's Vermin Killer, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

Sold in Packets, 3d., 6d., and 1s. each.
Sole PROPRIETOR:
Mr. J. R. BATTLE, Chemist, Lincoln, England.

AGRICULTURAL

DRESSING FOR ALL KINDS OF

(WHEAT, OATS, AND BARLEY).

For the Prevention of the Ravages of Birds, Insects, and Vermin.

It Drills easily without the use of Lime, and is perfectly harmless to the germination of the Seed.

It saves the expense of Crow Keepers and Bird Boys, and is pronounced by hundreds of Farmers to be of the greatest use to them.

SOLE AGENTS WANTED IN TOWNS WHERE NONE ARE ALREADY APPOINTED.

TERMS ON APPLICATION TO

WILLIAMS & PROCTOR, MANUFACTURING CHEMISTS, CHEPSTOW, MON.

destroying

CRAVEN'S POISON. VERMIN

For the effectual Destruction of RATS and MICE.

Guaranteed Second to None. Sale Increasing Daily.

USE CRAVEN'S VERMIN POISON,

For the efficacy of which numerous Testimonials have been received. Sample Packets Post Free. Prices, 2d., 3d., &d., and 1s.—1s., 1s. &d., 3s., and 6s. per dozen. Carriage Paid. Counter Bills.

F. CRAVEN, Chemist, Batley Carr.

100 Rats destroyed for a Shilling by BARBER'S PHOSPHOR PASTE

WRAPPED NEATLY FOR THE COUNTER.

Eandsome attractive Fosters supplied; if conspicuously placed will command



3d., 6d., 1s., 2s. 6d., and 5s. Tins. Also

BARBER'S VERMIN KILLER.

SOLD THROUGHOUT THE WORLD. Kills Mice upon the spot. In packets, 3d., 6d., and 1s.
Be not deceived with worthless imitations. Observe the Name!!! The VERMIN KILLER sent free by post at the following prices:

2d. 3d. 6d. 1s. 0d. 1s. 0d. 1s. 0d. 1s. 0d. 1s. 0d. 2s. 0d. 6s. 0d. Per Dozen. The PHOSPHOR PASTE, at same prices. Carriace paid per rail for enclosure to any Wholesale House, or direct, for quantity of either Paste or Killer.

Special arrangements are made for Sole Agency with Chemists.

WORKS. SALISBURY: ESTABLISHED 1848. Special Quotations to Shippers. Supplied by all the London Wholesale Houses.

LLOYD RAYNER'S £75 CHEMIST'S SHOP

FITTED COMPLETE WITH ALL NEW GOODS.

INCLUDING

GLASS SHOW CASES, SHOP BOTTLES, JARS, &c.

If for Export, suitable for any climate, including Packing Cases, and delivered to any of the London Docks, free, £85.

The above Fittings are suitable for a Shop 14 feet long by 12 feet wide.

WHOLESALE AND RETAIL DRUGGIST'S, SURGEON'S AND DENTIST'S VALUER.

An Extensive Stock of Chemist's, Surgeon's, Dentist's, Grocer's and other Trade Fixtures, Office Fittings, Utensils, &c.

ALL KINDS OF FIXTURES BOUGHT OR TAKEN IN EXCHANGE.

SHOW ROOMS AND OFFICES-

333 KINGSLAND ROAD.

FACTORIES-

2 DOWNHAM ROAD, KINGSLAND;

WHITMORE ROAD, HOXTON, LONDON, N.

CASTOR OIL SHEEP OINTM

he most effectual Cure of Scab, Killer of Ticks, Red Lice, and all other Parasites; also

GENUINE SHEEP

Prepared by steam power, and none but the best materials being used, these Oir tments are uniform in strength, and the consistency most suitable for Smearing in hot or cold weather.

Sold in Drums of 4, 7, 14, 28, 56, and 112 lbs. each.

FOR SHEEP AND LAMBS. GREATLY PROMOTES THE GROWTH OF THE WOOL.

A certain Preventive and Cure of Scab, Destructive to Ticks, Lice, and all Parasites infesting the Skins of Sheep, Cattle, and other Animals.

PRICE -/6. LB.

Sold in Drums of 5, 10, 20, 30, 40, 50, and 100 lbs. each.

TEE CELEBRATED

HORSE, SHEEP, AND CATTLE MEDICINE.

We are the Sole Manufacturers of this Medicine, and will at once commence Legal Proceedings against anyone copying our Trade Name, Labels, &c.

In Bottles, 2s. 6d., 5s., and 10s. each.

PRICE LISTS ON APPLICATION TO

TOMLINSON & HAYWARD, Manufacturing Chemists, LINCOLN.

Agents required in every Town. Hand-bills, Pamphlets, Posters. Show ards, for these and their other Preparations—BUTTER POWDER, GRANTLAR BROWNING," DANDELION COCOA—supplied on receipt of Trade Address.

ESTABLISHED 1877.

COMPANY CONDY 8

CONDY'S FLUID WORKS,

FORD'S FOLLY, LONDON,

The Cheapest of all.



The Cheapes?

SPECIAL SCALE OF

REDUCED WHOLESALE PRICES

INCREASED DISCOUNTS FOR CASH IN 14 DAYS.

REDUCED PRICES.

Condy's Fluid, RED 10 size, 4/0 per dcz. 2/0 8/0 4/0 ,, 16,0 Condy's Fluid, GREEN 0/6 3/6 1/0

2/0 ,, 14 0 ... Condy's Ozonised WATER 2/0 8/0

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Assorted Orders for Six Dozen

••• One Gross 10 % and 21 %. SPECIAL TERMS FOR LARGER QUANTITIES SENT ON APPLICATION.

ALL Wholesale Houses supply our Genuine Articles at our Reduced Price?.

G Order R. CONDY & CO.'S Articles, and INSIST on being charged our REDUCED PRICES. ESTABLISHED 1877.

SPRATTS PATENT MEAT "FIBRINE" DOG CAKES & POULTRY MEAL,

DOG MEDICINES AND DOG SOAP.

CHEMISTS AND DRUGGISTS. The above Goods have an enormous Sale. For Terms, address-"SPRATTS PATENT," Bermondsey, S.E., or order through your Wholesale House.

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EDWIN HELLIAR. CHEMIST. MANUFACTURING YEOVII.

Begs to call the attention of the trade to the following specialities, which will be found worthy of a place in the stocks of all Chemists, and the favour of an order, either direct or through the leading London Houses, will much oblige.

Fly Tick and Lear Powder, for dressing Sheep and Sneep and in tins, 1/, 2/, 3/6 ... pots, 1/, 2/6 ... tins, 2/6, 4/6 ... 6d. Lambs Foot Rot Paste .. Condition Powders for Horses ...
Canino or Dog Soap ...
Worm Powders for Dogs $7\frac{1}{2}$ d., $1/1\frac{1}{2}$, 2/9 3d., 6d., 1/9Balsam Honey for Coughs Vermin Killer

London Wholesale Agents:—Hovenden & Sons, Barclay & Sons, Sanger & Son, W. Edwards & Son. Exeter:—Evans, Gadd & Co.

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LEECHES!

Warranted Healthy, Wholesale and for Exportation, Direct from Marshes.

FITCH & NOTTINGHAM, Leech Brecders.

TRADE MARK MARSEILLES, & 55 PENTONVILLE REGISTERED. ROAD, LONDON, N. All Orders by Post receive immediate attention.

INDEX TO ADVERTISEMENT'S.

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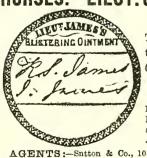
(Manufactured by R. J. JAMES, the Grandson of the Inventor).

This celebrated Blister is now offered to the Trade at the following reduced prices:-14/- per doz. to £1 3 0 , | ½ lb. pots from 1 oz. pots from £4 4 0 per doz. to £1 5 6 2 8 0 ,, 2 4 0

Observe the Trade Mark.—"A Horse's Head on the top of each Pct, and the signature, R. J. James." Wholesale Agents, Lutler & Criste, 4 Chastle, 18. Wholesale Agents, Lutler & Criste, 4 Chastle, 18. Wholesale Agents, Lutler & Criste, 4 Chastle, 18. Wholesale Agents, Son & Thompson, 11 Allersgate Street; Hayes & Co. Dublin; Goulding, Cork; Foggitt, Thirsk; and Sang & Barker, Edinburgh. Agents for the Colonies required. Apply, with reference, to R. J. JAMES, 15 Union Bank Buildings, Ely Place, London, E.C.

JAMES v. JAMES.—Lord Romlint, the Master of the Rolls, on February 23, 1872, declared "that I had an equal right with other members of the Inventor's family possessing the receipt to make and sell this Blister."—R. J. JAMES.

ESTABLISHED 1833. HORSES.—LIEUT. JAMES'S BLISTER.



CAUTION.

The annexed Label is at the top of every Pot of the ORIGINAL and only GENUINE BLISTER.

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raimes & Co., Edinburgh, Liverpool, and York, are now and have been Agents 45 years.

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COLONIAL A GENTS:—MELBOURNE and WELLINGTON: Felton, Grimwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros. & Co.; Dunedin and Auckland: Kempthorne, Prosser & Co.; Calcutta: Smith, Stanistreet & Co.

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R. S. JAMES, 31 Years Sole Manufacturer, STANFORD, FARINGDON, BERKS. Advertised in "Bell's Life" 45 years. Beware of a Spurious Imitations.

CATTLE MEDICINE.

ESTABLISHED MORE THAN FIFTY YEARS.

CORNER'S PINE'S DEVONSHIRE OILS

For Outward and Inward Application, is the best and cheapest remedy for an ailment Stock is liable to, and no stable, farmyard, or shepherd should be without th

Cattle and Horses.—As an Embrocation or Drench for Bruises, Swellings, Sprains, Swollen Udders of Cows, the Scour in Calves, Internal and External Inflammations, Butts, &c., Wounds or Galls of any kind. WINE SIZE, 2s.

Lambing.—Invaluable to the Shepherd during Lambing, for Colds, Inflammations. Cleansing, Udder-ill, Scour, &c.

In Sheepshearing, for Cuts, Sores, or Sprains.

For the Fly and Maggot in Sheep.—Nothing can surpass their value in summer for healing the worst Sores caused by the Fly, at the same time invigorating the growth of Wool.

same time invigorating the growth of Wool.

Sole Proprietor, RICHARD CORNER, WELLINGTON, SOMERSET.

*** Anyone vending an article purporting to be PINE'S DEVONSHIRE OILS, with-out his Signature on the bottle, will be proceeded against. Supplied by all Wholesale Houses, of whom Bills, Posters, and Show Cards can be had.

SCOUR IN LAMBS CURABLE BY

THE DEVONSHIRE COMPOUND.

This Preparation has not been equalled for its immediate effects in checking this fatal disease in Lambs, and is quite a different preparation to the Devonshire Oils. In Bottles, 2s. each.

"Dear Sir,—The Devonshine Unis, In Bottles, 2s, each,
"Dear Sir,—The Devonshine Compounn you sent m: I have used in six cases of Scour in Lambs, with complete success in each case; I therefore think it a useful medicine, having lost fifteen Lambs before I used the compound,"—I remain, dear Sir, yours very truly,
Mr. R. Corner, Wellington.

HORSE, CATTLE,



Dated 27th December, 1865.

BY ROYAL APPOINTMENT.

SON 80

INVENTORS AND SOLE PROPRIETORS OF THE



By Special Warrant, Dated 10th February, 1866.

For all Disorders in Horses, Cattle, Calves, Sheep, and Lambs.

Patronised for over 40 years by Royalty, and the principal Stock Breeders, Horse Proprietors, and Agriculturists of the British Empire.

The No. 2 Medicine Chest contains the following matchless remedies:-

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Admirably adapted for all ordinary ailments among Stock, and each preparation can be had separately. Full and easy directions enclosed.

Awarded "Certificate of Merit" by the National Agricultural Society of Victoria, Australia, Spring Exhibition, 1871; President's Medal, Spalding Show, July, 1872; Silver Medal, Manchester and Salford Show, November, 1874; Silver Medal, Preston Agricultural Show, June, 1875; Silver Medal, Cheshire Agricultural Society, Stamford Show, September, 1875; Silver Medal, Cheshire Agricultural Society, Crewe Show, September, 1875; Special Prize, National Agricultural Society of Victoria Australia, November, 1875; Medal, Cheshire Agricultural Society, Crewe Show, September, 1876; Silver Medal, South African Exhibition, Cape Town, 1877; Silver Medal, Northumberland Agricultural Society, Newcastle-on-Tyne Show, August, 1877; Silver Medal, Knutsford Show, July, 1878; Medal, North Berwick Show, July, 1878; Medal, Derby, September, 1879; Silver Medal, Wellingborough, September, 1879; and Medal, Bentbam, September, 1880.

Caution .- Beware of low-priced Imitations, and see that the name of DAY, Son & HEWITT is on all Bottles and Packets.

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, BAKER STREET, LONDON,

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ESTABLISHED A QUARTER OF A CENTURY. AWARDED 53 GOLD AND SILVER MEDALS BY VARIOUS AGRICULTURAL SOCIETIES. TIPPER'S MEDICATED POWDERS,

Specially prepared for Horses, Cows, Pigs, Sheep, and Poultry. They surpass anything ever introduced, preserve health, strength, and condition, cure Coughs, Colds, Worms, &c., and are the best known preventitives of disease. Will keep in any climate. Sold in 1s., 4s., 12s., and 24s. Canisters.

S DOG (MEAT) E Keep Dogs in good condition and free from disease.

ER'S LACTEAL COMPOUND,

For rearing Calves without Milk, and improving their condition.

These are the only preparations of the kind manufactured by a qualified Veterinary Surgeon.

B. C. TIPPER & SON, M.R.C.V.S., BALSALL HEATH, BIRMINGHAM.

DRUGS, CHEMICALS, PHARMACEUTICAL PREPARATIONS. GABRIEL TROKE, SI

Wholesale and Expo Druggists and Manufacturing Chemists, AD LONDON.



Manufactured solely by GABRIEL & TROKE, WHOLESALE DRUGGISTS, 82 CITY ROAD, LONDON.

MANUFACTURERS OF ALL VETERINARY PREPARATIONS, EVERY KIND OF VETERINARY INSTRUMENTS AND SUNDRIES. SAMPLES AND SPECIAL QUOTATIONS FOR LARGE BUYERS,

Balls are most of for export, are put up in s of the most recipes faithipping orders lowest market Price Lists of a very extensive characte most handy referable style on application. adapted for They are pled Balls of I dozen each. Capsuled Balls formulæ on hand, and private I accurately dispensed. Shi any climate. Oils are prescribed convenient and safe keeping good in any Boxes of 1 dozen eac approved formulæ on

these Balls are obvious.
I hermetically sailed gelanarmiless, and immediately
The Capsule will not only
mp dry and hard, but will
ar for any reasonable time,
of the medicine—especially
or Ammonia, or Essentia The superior advantages of these Balls are The mass is confined in a hermetically set thious Capsule, perfectly harmless, and dissolved in the stomach. The Capsule will prevent the Ball from getting dry and hard, preserve its purity and power for any reasont and ensure the effectiveness of the medicine—when such drugs as Camphor Ammonia, or

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MEDICAL SHOP FITTERS & SHOW CASE MANUFACTURERS

22 GUN STREET, BRUSHFIELD STREET, BISHOPSGATE, LONDON.

SPECIAL NOTICE TO CHEMISTS AND THE TRADE.

The Agreement of Partnership having terminated between FILMER KIDSTON, BOWLING & GOVIER, Shop Fitters, &c., of Duke Street, Brushfield Street, Bishopsgate, Messra. BOWLING & GOVIER beg to state that their business will now be carried on at the above address, where all goods of their manufacture can be obtained.

Having conducted the Business for the past seven years in Duke Street, and being connected with it for upwards of 20 years, the same workmanship and design may be relied upon as heretofore.

Plans and Estimates supplied for the entire Fittings of Chemist's Shops, &c.



PTIC



This New Persian Herbal Extract Cures (no matter how Chronic) Neuralgia, Rheumatism, Rheumatic Gout, Lumbago, Sciatica, Toothache, Faceache, Earache, and all affections arising from Cold.

Arising from Cold.

It is an invaluable remedy, and unlike others of the present day it is guaranteed free from Colchicum. Belladonna, Henbanc, Aconite, and all deleterious drugs. Since its discovery it has been tested with unprecedented success, proving it to be a complete specific for all Resumatic Affections, as well as for low nervous depression and other minor maladies; showing also its wonderful remedial powers by its perfect control over severe and chronic cases of many years standing as over those of recent date, and far exceeding in completeness and rap dity of cure anything yet known.

thing yet known.

thing yet known.

AUTHENTICATED TESTIMONIALS.

6 William Street, Euckingham Gate.

London, April 11th, 1881.

Nirs,—I have suffered from Rheumatic Gout for the last ten years. I have been in three London Hospitals, and three months at the Bath Mimeral Water Hospital.

1 could get ears, but soon the pains returned. I bad a bottle of your Koptica, and the control of the pains returned. I bad a bottle of your Koptica, and whand and knees and ankless and my joints become pliable, and I am now able to go to my duties quite freely and without pain. I shall keep your Koptica with me. I strongly recommend it to all who are troubled with Rheumatic Gout.

Yours, &c., Richard Oborn.

Any person making inquiries from Mr. Oborn, or from any of the people in his neighbourhood, where he has long been known as almost a cri, plc, will soon accertain the truthfulness of this Testimonial.

Messus, Squire, Fox & Co.

364 Portobello Road. Notting Hill. June 24th, 181.

neighbourhood, where he has long been known as almost a cri, plc, will soon a cert's neither truthfulness of this Testimonial.

Messrs. Squire. Fox & Co. 364 Portobello Road, Notting Hill, June 24th, Itsl.

Messrs. Squire. Fox & Co. 364 Portobello Road, Notting Hill, June 24th, Itsl.

Gentlement, I have suffered from Scietica for many months, but your Koptica which was recommended to me by a friend, has completely cured me.

Yours, &c., W. O. Bellingham Street, St. Jame's Park, S.W., June 19th, 18tl.

SIRS.—I can certify, after suffering twelve months from Rheumatic Gout, that I am gradually getting much better from taking your Koptica. The swelling has gone down greatly, and I feel my hands nearly well. I shall continue to take it, and thoroughly recommend it to all my friends.

To Messrs. Squire, Fox & Co.

Bloomsbury Maussion, London.

Mrs. JOSEPH SIMMONS, of Lancaster House, Clifton Gardens, W., writes, under date of October 5th, 18st, that her Neuralgia is very much better, and that she has recommended Koptica to many of her friends.

*## We are constantly receiving letters from all parts of the kingdom bearing its imony to the every great benefits derived from Koptica.

Chemists, &c., should procure it at once, as it is now extensively advertised.

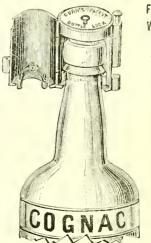
Sold in very neat small pink packets at 29, 3 D. and 48, 6D.

*## doz., #doz., and dozens packet in ourers.

Terms and prices from SqUIRE, FOX & Co., Bloomsbury Mansion, London.

(QUININE & PHOSPHORUS,) THE BEST NERVE TONIC. DRUG CO, BRIGH

BURNS'S



FOR SECURING UNDER LOCK WINES, POISONS, SCENTS. EXPENSIVE CHEMICALS.



FOR PRICE LISTS & TRADE DISCOUNTS APPLY TO

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SOLE MAKERS,

PHŒNIX WORKS, WOLVERHAMPTON.

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Patentees and Manufacturers of HIGH-CLASS LEVER and BRAMAH LOCKS.

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Druggists' Shops Fitted and Furnished complete with Fixtures, Bottles, Jars, Carboys, and

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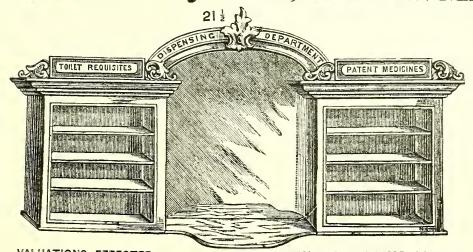
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PAUL'S SQUARE, BIRMINGH



VALUATIONS EFFECTED. BUSINESS TRANSFER AGENT. Second-hand Fixtures for Sale, Jars, Globes, Drawers, Bottles, Counter Glass Cases, Shelves, &c. SECOND-HAND FIXTURES OF ALL KINDS BOUGHT AND EXCHANGED. R. T. will wait upon parties fitting up, to plan and advise. 2nd-class fare only charged

FOR SALE, FIXTURES OR SHOP ABOUT SIXTEEN FEET BY TWELVE WRITE FOR LIST.



MR. M. HOFF,

You are hereby appointed

Purveyor to

Her Royal Highness the

Princess of Wales.

Given under my hand and seal, at Marlborough House, this 1st day of November, 1881.



COLVILLE,

of Culross,

Chamberlain.

TO THE TRADE.

3 CHARTERHOUSE BUILDINGS, LONDON, E.C., 14th November, 1881.

DEAR SIRS,—Referring to the annexed Diploma and to the AWARD OF MERIT given to M. HOFF and myself by the International Medical and Sanitary Exhibition, I do not think it necessary to refer again to the many other distinctions bestowed upon "HOFF'S" MALT EXTRACT, but rely upon the favour it has found with the Trade and the Profession in this country. Hoping that you will consider the two last English distinctions as a reward of acknowledgment of the excellence and superiority of our preparation, I trust that you will continue to favour me with your orders. Our English Trade Mark is:

HOFF'S MALT EXTRACT,

Leofold Hoff, Son of M HOFF.

Yours very truly,

LEOPOLD HOFF (Son of M. Hoff),

The Only Appointed Malt Extract Maker to Her Royal Highness the Princess of Wales.

CRAWSHAW'S SPECIALITIES.

6d. DYES(14 to the Doz.)In 1-gross Counter Cases48/- Gross.	3d. PERFECT BLACK DYEIn & Gross Wood)
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2d. DYESIn ½ Gross Boxes14/- Gross.	POWDERIn 3 Gross Wood Boxes
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1d. DYESOn ½ Gross Cards	1d. BOXES CRAWSHAW'S INSECT
1d. DYES In ½ Gross Boxes	POWDERMounted on Cards of 4 Gross
6d. PERFECT BLACK DYEIn † Gross Wood Boxes	3d. BOXES CRAWSHAW'S BEETLE POWDERIn ½ Gross Wood Boxes

E. CRAWSHAW & CO., 80 FANN STREET, ALDERSGATE STREET, LONDON, E.C.

GLOVE. RETAIL, 2s. & 3s. each.



BY HER MAJESTY'S



ROYAL LETTERS PATENT.

21/- Gross.

9/- Doz.

48/- Gross.

21/- Gross.

7/- Gross.

21/-Gross.





INDIA RUBBER FLESH GLOVE AND RUBBER.

This is an Entirely New Application of India Rubber, and lovers of the Bath pronounce them

THE ONLY EFFICIENT FLESH GLOVE AND RUBBER.

Being always absolutely Rough in hot or cold water, they are altogether unique. They cannot scratch the body, and produce a fine lather with Soap. They are manufactured from Pure India Rubber (the properties of which are peculiarly cleansing and genial to the skin), and retain their strength for many years. Wholesale of Druggists' Sundriesmen, Perfumers, &c.

I. LIVERMORE, Patentee.

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GREAT REDUCTION.

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HAVE CONCLUDED TO REDUCE THE PRICE OF

INDIA RUBBER POROUS STRENGTHENING PLASTERS

TO £1 10s. Od.,

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Every Plaster warranted to give perfect satisfaction.

A NEW CATALOGUE of our SPECIALTIES will be issued early during the NEW YEAR, 1881, containing a complete assortment of our

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Silver Medal, Paris, 1878.

ALLEN & HANBURYS'

Highest Award. Philadelphia, 1876.

N.B.—This Oil is made from fresh and selected livers at our own Factory at Longva, Norway. We can therefore guarantee its absolute purity, also that it will remain bright at a temperature of 32° F.

In Half-gallon Winchesters and in Stone or Tin Bottles, and in 25-Gallon Tin-lined Casks. Samples and Prices on application.

N.B.—The "Perfected" Cod Liver Oil is sold ONLY in capsuled bottles bearing Allen & Hanburys' signature. and is a totally distinct article from the above.

POMADES AND OINTMENTS.

In 1-lb. Tins, at 11d. per lb.; in 7-lb., 14-lb., and 28-lb. square screw-capped Canisters, at 10d. per lb.; in 55 lb. and 112-lb. square screw-capped Canisters, at 9d. per lb.

SILVER MEDAL. PARIS, 1878.

REVISED PRICE LIST OF

PREPARED BY PATENT PROCESS.

TRADE

A.D. 1715

MARK.

		1-1b.	1/-	6d.	1	1-1b.	1/-	6d.
		size.	size.	size.	1	size.	size.	size.
		Per doz.	Per doz.	Per doz.		Per doz.	Per doz.	Per doz.
ANISEED LIQUORICE)	30/-	8/-	4/-) .	32/-	8/6	4/4
BLACK CURRANT		٠,,	"	,,		"	,,	,,
DELECTABLE		,,	,,	,,	040711450	,,	,,	,,
EXTRACT OF MALT	JUJUBES,	"	,,	21	PASTILLES,	"	,,	,,
GLYCERINE	1	"	"	"	2 . 2	,,	,,	,,
LICHEN	2/-	"	"	"	1 2/2	"	,,	,,
LIQUORICE		?)	"	,,		"	,,	,,
MAGNUM BONUM	FER LB.,	"	,,	**	PER LB.,	"	"	,,
PECTORALE		1)	"	"		"	"	,,
PINE (Pâte de Jujube)RASPBERRY	or in tin	"	. "	"	or in tin	19	"	,,
		"	,,	"	,	"	,,	,,
ROSE	boxes.	"	,,	"	boxes.	"	"	,,
TAMARIND		"	"	"		,,	"	,,
VIOLET	}	"	"	"	}	"	"	"

All the above tins are neatly wrapped ready for sale.

GUIMAUVE PASTILLES	2/0 PER LB.	36/- 8/- supplied
GUIMAUVE SHEETS	2/- PER LB.	

010

The One Pound Tine are returnable at 8/- per doz.

A bronchial and pulmonic Jujube of delicious flavour.

Sold only in round boxes, to retail at 1/-, 1/9, and 3/- each; 9/-, 16/-, and 27/- per doz.

PASTILLES.

CRYSTALLIZED FRUIT PASTILLES2/- per lb. CRYSTALLIZED VOICE JUJUBES2/- per lb. Various assorted MEDICATED

GUIMAUVE PASTILLES (Crystallized).......2/6 per lb.) The two can be

THROAT

Prepared as originally suggested by Dr. PROSSER JAMES.

"Being of a soft consistence and ovoid shape, are better sated for tender conditions of the mouth than the hard angular lozenges commonly in use."—

British Medical Journal, September 18th, 1850.

"They are well adapted for sensitive patients, and, indeed, as 'elegant preparations' leave nothing to be desired.'—Lancet, March 19th, 1881.

had mixed.

1.—Morphia. $(\frac{1}{40} \text{ of a grain.})$

2.-Ipecacuanha. Are readily taken by children. These Pastilles are of the same strength as the B.P. lozenges.

3.-Morphia and Ipecacuanha. (1/40 grain Morph, and d grain Ipecac.)

4.—Compound Morphia and Ipecacuanha. A more active remedy than No. 3. (30 grain Morph., 15 Ipecac., 16 Squill, &c.)

5.—Opium and Belladonna. An agreeable substitute for the Troch. Opii B.P., and of the same strength.

6.-Aconite. Each Pastille equivalent to half a drop of the B.P. Tincture.

7.—Compound Camphor or Voice.

8.-Chlorate of Soda. May be taken whenever the throat is uneasy.

9.-Lithia. An agreeable mode of taking this alkali. Each Pastille contains 1 grain.

10.—Benzoated Voice. Useful to public speakers, &c. Less active than the Compound Camphor, No. 7.

11.—Chlorate of Potash. A more agreeable form than the lozenge of the Pharmacopæia.

12.-Chalybeate. (Pastilli Ferri, A. & H., 1 grain Citrate of Iron.) An agreeable form of lozenge, readily taken by children.

13.—Krameria. Containing 2 grains of Extract in each.

14.-Tannic Acid. Containing 1 grain of Tannic Acid in

These Pastilles are supplied in 1-lb. Bottles at 36/- per dozen, the Bottles returnable at 6/- per dozen; and in Boxes containing three ounces, to retail at 1/- each, 8/- per dozen.

Circulars showing Doses, &c., for distribution amongst Medical Men, supplied on application.

ALLIER LONDON, E.C. STREET, PLOUGH 37 LOMBARD

GENERAL LIST OF DRUGS, CHEMICALS, &C. POSTED FREE ON APPLICATION.